1 STATE OF CONNECTICUT 2 CONNECTICUT SITING COUNCIL **CERTIFIED** 3 Petition No. 1425 4 5 Gaylord Mountain Solar Project 2019, LLC, Petition 6 for a Declaratory Ruling, Pursuant to Connecticut 7 General Statutes §4-176 and §16-50k, for the Proposed 8 Construction, Maintenance and Operation of a 9 1.9-Megawatt AC Solar Photovoltaic Electric Generating 10 Facility Located at 360 Gaylord Mountain Road in 11 Hamden, Connecticut, and Associated Electrical 12 Interconnection 13 14 Zoom Remote Council Meeting (Teleconference), on Tuesday, November 17, 2020, beginning at 2 p.m. 15 16 17 Held Before: 18 JOHN MORISSETTE, Member and Presiding Officer 19 20 21 22 23 24 25

1	Appearances:
2	Council Members:
3	JOHN MORISSETTE, (Hearing Officer)
4	
5	QUAT NGUYEN,
6	PURA Designee
7	
8	ROBERT HANNON,
9	DEEP Designee
10	
11	ED EDELSON
12	MICHAEL HARDER
13	DANIEL P. LYNCH, JR.
14	
15	
16	Council Staff:
17	
18	MELANIE BACHMAN, ESQ.,
19	Executive Director and Staff Attorney
20	
21	FRED CUNLIFFE,
22	Siting Analyst
23	
24	LISA FONTAINE,
25	Fiscal Administrative Officer

1	Appearances:(cont'd)
2	For Gaylord Mountain Solar Project 2019, LLC
3	(Petitioner):
4	ROBINSON & COLE, LLP
5	280 Trumbull Street
6	Hartford, Connecticut 06103-3597
7	By: KENNETH C. BALDWIN, ESQ.
8	KBaldwin@rc.com
9	860.275.8200
10	
11	For the South Central Connecticut Regional Water
12	Authority (Intervener):
13	MURTHA CULLINA
14	One Century Tower
15	265 Church Street, 9th Floor
16	New Haven, Connecticut 06510
17	by: BRUCE MCDERMOTT, ESQ.
18	BMcdermott@murthalaw.com
19	203.772.7787
20	
21	For the Town of Hamden:
22	BRENDAN SHARKEY, ESQ.
23	
24	
25	

THE HEARING OFFICER: Good afternoon, everyone. This remote public hearing is called to order this Tuesday, November 17, 2020, at 2 p.m. Can everyone hear me okay?

Thank you. My name is John Morissette,

Member and Presiding Officer of the Connecticut

Siting Council. Other members of the Council are

Robert Hannon, designee for Commissioner Katie

Dykes, Department of Energy and Environmental

Protection; Mr. Nguyen, designee for Chairman

Marissa Paslick Gillett, Public Utility Regulatory

Authority; Mr. Ed Edelson; Mr. Michael Harder;

Mr. Daniel P. Lynch, Jr.

Members of the staff are Melanie Bachman,
Executive Director and Staff Attorney; Fred
Cunliffe, Supervising Siting Analyst; and Lisa
Fontaine, Fiscal Administrative Officer.

Please be aware there is currently a statewide effort to prevent the spread of coronavirus. This is why the Council is holding this remote public hearing, and we ask for your patience. If you haven't done so already I ask that everyone please mute their computer audio and/or telephone now.

This hearing is held pursuant to the

provisions of Title 16 of the Connecticut General Statutes and of the Uniform Administrative Procedures Act upon the petition from Gaylord Mountain Solar Projects 2019, LLC, for a declaratory ruling pursuant to Connecticut General Statutes Section 4-176, and Section 16-50K for the proposed construction, maintenance and operation of a 1.9-megawatt AC solar photovoltaic electric generation facility located at 360 Gaylord Mountain Road, in Hamden, Connecticut.

This petition was received by the Council on August 7, 2020.

The Council's legal notice of the date and time of this remote public hearing was published in the New Haven Register on October 2, 2020.

Upon this Council's request the petitioner erected a sign at the proposed permanent access drive to the site of Gaylord Mountain Road so as to inform the public of the name of the petitioner, the type of the facility, the remote public hearing date and contact information for the Council by website and the phone number.

As a reminder to all, off-record communication with the Council or a member of the Council's staff upon the merits of this petition

is prohibited by law.

The parties and interveners to this proceeding are as follows, the Petitioner, Gaylord Mountain Solar Project 2019, LLC, represented by Kenneth Baldwin, Esquire. The Intervener is South Central Connecticut Regional Water Authority, RWA, represented by Bruce McDermott Esquire.

We will proceed in accordance with the prepared agenda, a copy of which is available on the Council's Petition Number 1425 webpage along with a record to this matter, a public hearing notice, instructions for the public access to this remote public hearing, and the Council's citizens guide to siting procedures.

Interested persons may join any session of this public hearing to listen, but no public comments will be received during the 2 p.m. evidentiary session. At the end of the evidentiary session we will recess until 6:30 for the remote public comment session. Please be advised that any person may be removed from the remote evidentiary session or public comment session at the discretion of the Council.

The 6:30 p.m. public comment session will be reserved for members of the public who have signed

up in advance to make brief statements into the record.

I wish to note that the petitioner, parties and interveners, including their representatives and witnesses are not allowed to participate in the public comment session.

I also wish to that those who are listening, and for the benefit of your friends and neighbors who are unable to join us for the remote public comment session, that you and they may send written statements to the Council within 30 days of the date hereof either by mail or by e-mail, and such written statements will be given the same weight as if spoken during the remote public comment session.

A verbatim transcript of this remote public hearing will be posted on the Council's Petition Number 1425 webpage and deposited with the towns' clerk's office in Hamden and Bethany for the convenience of the public.

Please be advised that the Council does not issue permits for stormwater management. If the proposed project is approved by the Council the Department of Energy and Environmental Protection stormwater permit is independently required. DEEP

could hold a public hearing on any stormwater
permit application.

The Council will take a 10 to 15-minute break

The Council will take a 10 to 15-minute break at a convenient juncture around 3:30 p.m. We will continue with statements by public officials,

Mayor Curt Leng, then followed by Assistant Town

Attorney Brendan Sharkey. And then Town Planner

Daniel Kops.

Mayor Leng, please proceed.

Is Mayor Leng Available?

(No response.)

THE HEARING OFFICER: Okay. We'll continue with Assistant Town Attorney Brendan Sharkey.

Attorney Sharkey, are you available?
MR. SHARKEY: Yes. Thank you, Mr. Chair.

I come to this application and to this meeting today with some experience on a number of different fronts. In the first place, I'm an Assistant Town Attorney in Hamden, which is a position I've held for several years. So I'm a town official in that respect.

I also come as a former state representative for this district with knowledge of both the

Siting Council and the district where this is being located. But prior to my service in the State Legislature I also served as an attorney who represented applicants in front of the Connecticut Siting Council. In the telecom world that's where actually Attorney Baldwin and I first met each other back in the day.

I think as you know, and for those who are watching from the public, this procedure from the Siting Council perspective is designed to determine whether or not there is a demonstrated public need for this particular application, and whether that need supersedes or is in excess of what other environmental impact might be imposed by this particular installation.

And it's on that front that I think the Town of Hamden takes the position that the environmental impact and the impact on the community does not outweigh -- or it does outweigh the public need that might be fulfilled by this installation.

I think it's fair to say -- I also come at this, I should mention, with some experience in the renewable energy world. And I do know that it is generally -- and I'm happy to cite some other

policy documents that have been created by DEEP and others through the years -- that the installation of a solar array on property that is currently foresting is the least preferable application of solar, ground-mounted solar generally in the state.

The preference, I think it's fair to say from a public perspective, for ground-mounted solar is on existing landfills, on brown fields, obviously on rooftops where applicable, and also abandoned farmland which may or may not have other chemical or environmental residual in contamination on the site.

Those are preferable because they're already cleared. They're already not in use at the time and they don't have any particular -- solar panels, ground mounted don't have a particular environmental impact on those types of properties.

But when you are talking about clearcutting acres, many acres of existing forestland for the installation of solar you are talking about an environmental impact inherently that is not preferable. It's not preferred, I think, by state policy and it's certainly not preferred I think by the public. And I think that it's fair to say

that that's where the Town of Hamden comes down on this.

The power to be produced, yes, will be solar, will be renewable, but it will have no benefit to the Town of Hamden in spite of what the application indicates, that this is somehow a benefit to the Town.

As indicated in the petition, this, all the power to be derived from this solar installation will be sold to Southern Connecticut State
University, which for the most part is in New
Haven. A portion of the southern campus is in
Hamden, but this is not enuring to the benefit of
Hamden residents or ratepayers. This is going
directly to a particular source.

And while we can say that there's a general societal benefit associated with installing solar as much as possible wherever possible, I think it's a misnomer to say that this is somehow going to be a benefit to the Town of Hamden or it's residents.

So given all that I think -- and I believe you're going to hear tonight at the public session this evening evidence from those who have been following this locally and who are interested in

offering up their own perspective on this, that there will be other specific impacts as a result of this clearcutting and installation that I don't think is reflected in the petition as submitted to the Council at this point.

So it's for those reasons, while we appreciate the applicant's efforts as required by statute to do outreach to the Town, to the town leaders and to the neighbors, I think it's fair to say that there is virtual unanimity, you know, within the Town that this is not the right location for this installation.

And specifically within the Siting Council's purview, the environmental impact certainly outweighs the public benefit that might be realized by installing the solar facility at this particular location.

So I realize that Mayor Leng is not here at this point, but I think that also reflects -- I think it's fair to say that I can speak on his behalf with regard to that particular -- to my particular comments and I'm happy to answer any other questions that the councilmembers or the petitioner may have.

Before I leave, too, I would just ask for one

1 piece of clarification -- which I'm sorry that I 2 don't know the answer to this, but I didn't see it 3 in the petition as to whether -- because the 4 entity who will receive the power will be a state 5 government entity in the form of Southern 6 Connecticut was this application being installed 7 under the State's virtual net metering program 8 which allows for solar to be offered to either 9 state or municipal off-takers? 10 That's just a question that I would have for 11 the petitioner when the time is appropriate. 12 With that, I will conclude my remarks. 13 Thank you, Mr. Chairman. 14 THE HEARING OFFICER: Thank you, Attorney Sharkey. 15 Is it your understanding that Mayor Leng will 16 not be joining us? 17 MR. SHARKEY: I have not heard from him one way or the 18 I don't know if Town Planner Kops has 19 received any other information about that, but I 20 will check out, check him out to see if he is 21 planning to attend, in the Town Planner is going 22 to be offering comments following mine. 23 THE HEARING OFFICER: Very good. Thank you. 24 And we will continue with the Town Planner 25 Daniel Kops. Your comments, please?

DANIEL KOPS: Good afternoon, Mr. Chairman and honorable members of the Siting Council. THE HEARING OFFICER: Good afternoon. DANIEL KOPS: Can you hear me? THE HEARING OFFICER: Yes. Again, thank you. DANIEL KOPS: Slightly more than a year ago the Hamden Planning and Zoning Commission approved its ten-year plan of conservation and development, the The document recognizes the need to increase sustainability efforts including expanding the use of renewable energy sources, such as solar energy and wind power.

And in fact, Hamden has welcomed solar energy projects including one at the town transfer stations, another at Hamden well fields, and a third atop a parking garage -- but that doesn't mean that any and all energy projects are beneficial for Hamden.

And the POCD contains other relevant environmental goals as well; enhancing our tree canopy in order to reduce runoff by soil erosion and help recharge groundwater supplies, protecting steep slopes from developmental pressures and protecting plant and animal habitats.

The POCD stresses the importance of trees,

noting there are environmental, economic and health benefits. Trees are essential, improving drinking water quality, reducing flooding and providing essential wildlife habitat which is why the plan recommends strategies for both protecting existing trees and planting many more.

The proposed solar photovoltaic electric generating facility on Gaylord Mountain Road would destroy a substantial area of core forest, precisely what the POCD states shouldn't be done, and it would impose several costs the Hamden community will ultimately have to bear.

The site is steeply sloped. There's a substantial risk of stormwater runoff causing flooding and erosion. The fact that the site lies within the Mill River watershed means the area is of particular concern.

The project is also located very close to five wetland areas putting them at risk of degradation, especially wetland number five. The destruction of the twelve-plus acres of woodlands will contribute to the acceleration of climate change while eliminating essential plant and animal habitat, and compromising a significant portion of core forest.

The removal of the trees will also eradicate a key portion of a critical wildlife corridor impeding, greatly impeding migration of wildlife between the Naugatuck State Forest and Sleepy Giant State Park. And of course, of immediate concern to the owners of neighboring residential properties, the project will adversely affect both their quality of life and housing values.

Not only is this application not supported by Hamden's POCD, it's also inconsistent with state environmental policies. It ignores Connecticut's state policy regarding environmental sustainability as expressed in Public Act 17-218, which encourages use of landfills and brownfields, as better alternatives as Mr. Sharkey just pointed out.

That public act also requires a comprehensive environmental review by CT DEEP, which doesn't appear to have been carried out. The supporting analysis presented by the applicant is inadequate. The analysis of alternative sites not surprisingly identified other locations that were deficient, but it's not a convincing argument and it begs the question of what are the other alternatives that would not destroy over twelve

acres of forest? It's hard to believe that there aren't other suitable such sites. The 30-plus acre tire pond on State Street in Hamden is one such example.

The environmental assessment submitted by the applicant omits an analysis of the project's impact on the previously mentioned critical wildlife corridor and minimizes the significance of the core forest. Details such as the proposed type of revegetation seed mix used are questionable.

Not surprisingly there's considerable opposition to the application. You've already received letters in opposition from the Hamden Planning and Zoning Commission, the Inland Wetlands Commission, the Open Space Commission, Tree Commission, and the Hamden Land Trust as well as an initial letter of concern from Mayor Curt B. Leng who will be sending you another letter stating his opposition to the project shortly, and you've received a petition signed by over a thousand people against the project.

You've also received a petition for intervener status from the South Central Regional Water Authority, and you'll certainly hear more

from the public tonight during the public input session. The fact is you'll be hard pressed to find any resident in Hamden who supports this project. The reasons for the opposition are clear, the project is highly likely to have the types of adverse impacts I've noted.

It's true, the communities do sometimes proceed with projects that have known adverse impacts, but they normally do so because there are benefits that outweigh the economic, social and environmental costs. Unfortunately that's not the case here. There would be no appreciable benefit to Hamden.

The generated electricity is to be sold to universities within the state university system. The project won't even provide electrical power to Hamden. Given its 1.9-megawatt size, its contribution to the state system will also be somewhat limited, nor will it benefit the environment. Destroying a substantial area of pristine forest in order to produce a limited amount of solar energy doesn't result in an environmental win-win.

I therefore respectfully request that you deny this application, and I thank you and

1	appreciate your consideration of our concerns.
2	THE HEARING OFFICER: Thank you, Town Planner Mr. Kops.
3	At this time I'll call upon Mayor Curt Leng
4	one more time.
5	
6	(No response.)
7	
8	THE HEARING OFFICER: Mr. Kops, do you know if he's
9	going to be attending?
10	DANIEL KOPS: I do not know, sir. I didn't hear back
11	from him.
12	THE HEARING OFFICER: Okay.
13	Okay. Well, we're going to have to move on.
14	So that concludes the statements from public
15	officials, but we will move onto item C under the
16	agenda, administrative notice taken by the
17	Council.
18	I wish to call your attention to those items
19	shown on the hearing program marked as Roman
20	number 1C, items 1 through 96.
21	Does the petitioner or the intervener have an
22	objection to the items that the Council has
23	administratively noticed?
24	Attorney Baldwin?
25	MR. BALDWIN: We're set. No objection.

THE HEARING OFFICER: Thank you. Attorney McDermott?

MR. McDERMOTT: No objection. Thank you.

THE HEARING OFFICER: Thank you. Accordingly, the

Council hereby administratively notices these
existing documents. We will now continue with the
appearance by the Petitioner.

Will the Petitioner present its witness panel for the purpose of taking the oath?

Attorney Bachman will administer the oath.

MR. BALDWIN: Thank you, Mr. Morissette.

Again for the record, Ken Baldwin with
Robinson & Cole on behalf of the Petitioner,
Gaylord Mountain Solar Project 2019, LLC, and DSD
Renewables, LLC.

Our witness panel consists of four representatives from the petitioner, Gaylord Mountain Solar. They include John Bamman, a senior project manager; Amol Kapur, a senior sales manager, Jenny Nicolas, the development project manager; and Matt Gabor, a professional engineer and senior project manager with the petitioner.

From All Points Technologies we have some familiar faces for you. First, Michael Libertine, the Director of Siting and Permitting with All Points Technologies; Matt Gustafson, who's a

1 forester and registered soil scientist; and last 2 but not least, Brad Parsons who is a professional 3 engineer and the project engineer with All Points 4 on behalf of the petitioner. 5 And I would offer them at this time to be 6 sworn. 7 THE HEARING OFFICER: Thank you. 8 Attorney Bachman? 9 JOHN BRAMMAN, 10 AMOL KAPUR, 11 J E N N Y R. NICOLAS, 12 BRADLEY J. PARSONS, 13 MICHAEL LIBERTINE, 14 MATTHEW GUSTAFSON, 15 MATTHEW S. GABOR, 16 called as witnesses, being first duly sworn by the Executive Director, were examined and 17 18 testified under oath as follows: 19 20 THE HEARING OFFICER: Very good. Thank you. 21 MR. BALDWIN: Mr. Morissette, we have eight exhibits 22 listed in the hearing program, and then I would like to add a ninth exhibit. Those exhibits are 23 24 listed in the hearing program under Roman two, 25 under the appearance of the petitioner, sub B.

They include the petition itself submitted on August 7th, the petitioner's responses to the Council's interrogatories dated October 20th, the petitioner's sign posting affidavit dated November 3rd, the prefiled testimony of John Bamman and Brad Parsons both dated November 10th. And then some resumes from some of our witnesses Amol Kapur and Jenny Nicolas, as well as Matt Gabor.

And then our ninth exhibit was something we filed today. We've noted a reference in the environmental assessment, which is a part of Exhibit 1, to a stormwater management report that was supposed to be attached under a separate cover, but due to an oversight was not.

So we are thankful that that was discovered today, and we appreciate the cooperation of the Council in adding that as a ninth exhibit. And again, that's a stormwater management report prepared by All Points Technologies dated August 2020.

And I offer them for identification purposes at this time subject to verification by the witnesses.

THE HEARING OFFICER: Thank you. Please verify the

1 exhibits by the appropriate sworn witness. 2 MR. BALDWIN: Thank you. Unless there's objection by 3 the Council or the Intervener I'd like to verify 4 the witness as a panel, understanding that certain 5 witnesses are only responsible for certain of the 6 exhibits. 7 But in the interests of time and administrative efficiencies we'll do this as a 8 9 panel. 10 THE HEARING OFFICER: Thank you. Please continue. 11 MR. BALDWIN: So let me ask the witness panel, did you 12 prepare or assist in the preparation of the 13 existing listed in the hearing program under Roman 14 2B, items 1 through 9? Mr. Libertine? 15 THE WITNESS (Libertine): Yes. 16 MR. BALDWIN: Mr. Gustafson? 17 THE WITNESS (Gustafson): Yes. 18 MR. BALDWIN: Mr. Parsons? 19 THE WITNESS (Parsons): Yes. MR. BALDWIN: Ms. Nicolas? 20 21 THE WITNESS (Nicolas): Yes. 22 MR. BALDWIN: Mr. Gabor? 23 THE WITNESS (Gabor): Yes. 24 MR. BALDWIN: Mr. Bamman? 25 THE WITNESS (Bamman): Yes, we did.

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1
    MR. BALDWIN: Mr. Kapur? Amol, we can't hear you.
 2
 3
                            (No response.)
 4
5
    MR. BALDWIN: We're having trouble hearing Mr. Kapur.
 6
              Why don't we proceed?
7
              And do you have any amendments or
8
         modifications to offer to any of those exhibits at
9
         this time? Mr. Libertine?
    THE WITNESS (Libertine): I do not.
10
11
    MR. BALDWIN: Mr. Gustafson?
12
    THE WITNESS (Gustafson): No.
13
    MR. BALDWIN: Mr. Parsons?
14
    THE WITNESS (Parsons): No.
15
    MR. BALDWIN: Ms. Nicolas?
16
    THE WITNESS (Nicolas): No.
17
    MR. BALDWIN: Mr. Gabor?
18
    THE WITNESS (Gabor): No.
19
    MR. BALDWIN: Mr. Bamman.
20
    THE WITNESS (Bamman): No, I don't.
21
    MR. BALDWIN: And we'll try again. Mr. Kapur?
22
              We can't hear you, but let the record reflect
23
         that the Mr. Kapur said no -- if that's okay, Mr.
24
         Chairman.
25
    THE HEARING OFFICER: Yes, I recognized his nod of
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1
         agreement. Thank you.
2
    MR. BALDWIN: Perhaps Mr. Kapur, if you could maybe
3
         dial in and use audio on your phone maybe we can
4
         circumvent around the audio problems that we're
5
         experiencing.
6
              And is the information contained in those
7
         exhibits true and accurate to the best of your
8
         knowledge? Mr. Libertine?
9
    THE WITNESS (Libertine): Yes.
10
    MR. BALDWIN: Mr. Gustafson?
11
    THE WITNESS (Gustafson): Yes.
12
    MR. BALDWIN: Mr. Parsons?
13
    THE WITNESS (Parsons): Yes.
14
    MR. BALDWIN: Ms. Nicolas?
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    THE WITNESS (Nicolas): Yes.
16
    MR. BALDWIN: Mr. Gabor?
17
    THE WITNESS (Gabor): (Inaudible.)
18
    MR. BALDWIN: Mr. Gabor, could you repeat that please?
19
    THE WITNESS (Gabor): Yes.
    MR. BALDWIN: Thank you. Mr. Bamman?
20
21
    THE WITNESS (Bamman): Yes.
22
    MR. BALDWIN: Mr. Kapur.
23
    THE WITNESS (Kapur): Yes.
24
    MR. BALDWIN: We gotcha. Okay.
25
              And then finally I'll ask the witnesses, do
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1
         you adopt the information contained in those
2
         exhibits as your testimony in this proceeding?
3
         Mr. Libertine?
4
    THE WITNESS (Libertine): Yes.
5
    MR. BALDWIN: Mr. Gustafson?
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    THE WITNESS (Gustafson): Yes.
7
    MR. BALDWIN: Mr. Parsons?
8
    THE WITNESS (Parsons): Yes.
9
    MR. BALDWIN: Ms. Nicolas.
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    THE WITNESS (Nicolas): Yes.
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    MR. BALDWIN: Mr. Gabor? Mr. Gabor?
12
    THE WITNESS (Gabor): Yes.
13
    MR. BALDWIN: Mr. Bamman.
14
    THE WITNESS (Bamman): Yes.
15
    MR. BALDWIN: And Mr. Kapur?
16
    THE WITNESS (Kapur): Yes.
17
    MR. BALDWIN: All right. We're in business.
18
              Mr. Morissette, I offer them as full
19
         exhibits.
20
    THE HEARING OFFICER: Thank you, Attorney Baldwin.
21
              Does the Intervener object to the admission
22
         of the Petitioner's exhibits.
23
    MR. McDERMOTT: No objection. Thank you,
24
         Mr. Morissette.
25
    MR. BALDWIN: Mr. Morissette, we offer our witnesses
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1 for cross-examination by the Council. THE HEARING OFFICER: Thank you. The exhibits are 2 3 hereby admitted. We will begin cross-examination 4 of the petitioner by the Council starting with 5 Mr. Cunliffe. 6 Mr. Cunliffe? 7 MR. CUNLIFFE: Thank you, Mr. Morissette. 8 I will begin with Attorney Sharkey's query 9 regarding the power offtake going to the 10 Connecticut State University system through our 11 virtual metering. Can you confirm that is the 12 case? 13 THE WITNESS (Bamman): Yes, that is the case. 14 MR. BALDWIN: Mr. Cunliffe, if I could? 15 If the witness, just for everyone's benefit, 16 before you answer the question if you would 17 identify yourself just for the clarity of the 18 Thank you. record? 19 THE HEARING OFFICER: Thank you Mr. Baldwin. 20 MR. CUNLIFFE: Referencing response to Interrogatory 15 21 it stated the nearest adjacent property line to 22 the proposed solar field perimeter fence is 23 approximately 22 feet to the northeast, a parcel 24 identified as 380 Gaylord Mountain Road. 25 On attachment two with the responses of

1 interrogatories it has an aerial view of the site 2 including identifying that parcel of property with 3 a label on it as 360 Gaylord Mountain Road. 4 Could you clarify the address for that 5 property? 6 MR. BALDWIN: Mr. Parsons? 7 THE WITNESS (Parsons): I am pulling up the exhibit 8 right now. 9 I will have to confirm whether or not it is in fact 360 or 380. I will -- if that's something 10 11 I can get back to you on, it may just be a typo on 12 an address. 13 MR. CUNLIFFE: Thank you. Referring to the response to 14 Interrogatory 39, the response states the facility 15 can be remotely shut down. 16 Can the facility also be shut down manually? 17 THE WITNESS (Gabor): Yes, there's a GOAB switch that 18 can cut power to the plant manually. 19 THE HEARING OFFICER: Please define what a GOAB switch 20 is? 21 MR. CUNLIFFE: Where is the manual switch located? 22 THE WITNESS (Gabor): It's shown on the plans along the 23 access driveway to the south of the parcel. 24 MR. CUNLIFFE: And would this be available for 25 emergency responders to access if need be?

1	THE WITNESS (Gabor): Yes, sir.
2	THE HEARING OFFICER: Mr. Cunliffe, before you continue
3	could the witness please define what a GOAB switch
4	is, for the record?
5	THE WITNESS (Gabor): It's a gang operated air break
6	switch. And it's so you can basically see that
7	the plant is disconnected.
8	MR. CUNLIFFE: What is the slope of the permitted
9	access route?
10	THE WITNESS (Gabor): We're doing it from the All
11	Points data.
12	THE WITNESS (Parsons): Yeah. So we're working on
13	getting that number for you.
14	It's approximately 15 percent.
15	MR. CUNLIFFE: And what would be the surface of that
16	route?
17	THE WITNESS (Parsons): Right now it is proposed to be
18	a processed aggregate gravel base.
19	MR. CUNLIFFE: And did the Petitioner have any
20	discussions with the local emergency responders to
21	determine if the design of that access road is
22	suitable for emergency response vehicles?
23	THE WITNESS (Parsons): We have not had that
24	conversation with the the Town.
25	MR. CUNLIFFE: Would there be opportunity to be able to

1 speak with the department before you finalize the 2 design driveway? 3 THE WITNESS (Gabor): Yes. Yes, there would be. MR. CUNLIFFE: Referring to the response to 4 5 interrogatory 42 it identifies the acreage of 6 clear treeing to be approximately 2.03 acres and 7 acreage of tree clearing in wetlands to be 8 approximately 0.06 acres. 9 Is the 0.06 acres inclusive within the 2.03? Or should it be added, or totaled? 10 11 THE WITNESS (Parsons): The acreage of the tree 12 clearing in wetlands is not included in the 13 2.03 acres. That actually would be included in 14 the overall acreage of clearing and grubbing, even 15 though that that area is not to be grubbed -- but 16 it's interior of that overall area. 17 MR. CUNLIFFE: All right. Thank you. Referring to the 18 response to Interrogatory 43. To clarify, the 19 trees within the 50-foot buffer to the south 20 currently shade the facility and would cause an 21 approximate 8 percent of energy loss. 22 Is that correct? 23 THE WITNESS (Gabor): That is correct. 24 MR. CUNLIFFE: That was Mr. Gabor on that response? 25 THE WITNESS (Gabor): I'm sorry. Yes.

1	THE HEARING OFFICER: Excuse me, Mr. Cunliffe. Before
2	you continue, I'll just remind everyone to please
3	state your name for the transcriptionist prior to
4	answering the question. Thank you.
5	MR. CUNLIFFE: Would the trees within that 50-foot
6	buffer let me restate. Is the 8 percent an
7	average per year for your loss of energy?
8	THE WITNESS (Gabor): This is Matt Gabor with DSD.
9	So it's not average. It's over the entire
10	year. You know, as the sun changes its position
11	in the sky the impacts of the trees are different,
12	but over the course of the year those trees reduce
13	the production by 8 percent.
14	MR. CUNLIFFE: Would the trees within that 50-foot
15	buffer to the south be expected to grow taller and
16	further shade the facility?
17	THE WITNESS (Gabor): This is Matt with DSD. We did
18	not anticipate growth with those trees in that
19	calculation.
20	MR. CUNLIFFE: Would management of those specific trees
21	include tree cutting, trimming, or desire to
22	heights?
23	Is that something that may be anticipated if
24	you were to revisit your production losses?
25	THE WITNESS (Gabor): This is Matt again with DSD. We

would like to keep those trees in order to provide screening to that, to the neighbors to the south. We obvious -- you know, we would produce more by cutting them, but we chose to, you know, give a little bit more privacy at our expense.

- MR. CUNLIFFE: And to maybe provide further visual mitigation, can a row of low-growing evergreens such as red cedar be planted along that north edge of the buffer either now or into the future?

  THE WITNESS (Gustafson): This is Matthew Gustafson with All Points. We are currently proposing a planted berm which includes a small urban berm as well as planting on top of the evergreens to meet
- MR. CUNLIFFE: So you don't see any need for additional plantings closer to that northern boundary disturbance?
- THE WITNESS (Gustafson): Based on our preliminary assessments of the visual impacts, the proposed planted berm as it stands will provide a screening to a majority of the facility immediately, and through growth over time will screen more of the facility as the trees obviously increase in height over the next two to five years.

MR. CUNLIFFE: Thank you.

that such goal.

1 THE REPORTER: I'm just having a little trouble hearing 2 the last speaker. He's coming in and out. I did 3 get his testimony, but it was a little rought. 4 Thank you. 5 THE HEARING OFFICER: And Mr. Gustafson, your 6 connection seems to be a little off. 7 THE WITNESS (Gustafson): I'll try to call in on my 8 phone to remedy the issue. 9 THE HEARING OFFICER: Thank you. 10 MR. CUNLIFFE: The production value in the shade 11 analysis conducted, is there any concern that 12 maybe in the future you might decide to remove 13 that buffer of trees? Or is that not possible? 14 THE WITNESS (Gabor): This is Matt from DSD. 15 We do not foresee pursuing that option. 16 MR. CUNLIFFE: Along the lines of landscaping, the 17 permanent access road is somewhat missing maybe 18 some plantings along the south side of that road. 19 Is that something that could be looked at to 20 be added? 21 THE WITNESS (Parsons): This is Brad Parsons with All 22 Points. Yes, that is something that could be 23 looked at as being added, however I would like to 24 note that that access road is actually cut in. So 25 the view really should be obstructed just by the

1 fact that it will be lower than the grades 2 adjacent to it on the south side. 3 MR. CUNLIFFE: Understood. Is the clearing on the 4 southwest and northeast areas of the project for 5 shade mitigation? THE WITNESS (Parsons): This is Brad Parsons. 6 7 Can you be a little more clear on exactly 8 which areas you're -- you're referring to? 9 The southwest area along the fence line, MR. CUNLIFFE: 10 you have the wetland five just inside the fence 11 perimeter. And just outside that fenced area 12 there appears to be some limited disturbance --13 that seems to be a little large. And that's 14 looking like it's for shade mitigation? 15 THE WITNESS (Parsons): This is Brad Parsons. 16 that that is correct. That is for -- for 17 additional shade mitigation and removes the 18 potential for additional losses that we're taking 19 elsewhere. 20 MR. CUNLIFFE: And in the northeast corner it appears 21 the limited disturbance goes pretty close to the 22 property just to the north. And it appears that 23 you might be looking at shade mitigation again for 24 the sun coming from the east as it rises? 25 THE WITNESS (Parsons): That -- that is correct as

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well. That area is also for shade mitigation.

MR. CUNLIFFE: Referring to the overall development plan, why is the temporary access road being left in place?

THE WITNESS (Parsons): This is Brad Parsons. The temporary access road is being left in place mainly due to the fact that removing it, in our opinion, would have actually caused a potential for more erosion and more disturbance upon completion of the site.

And we also felt that it was a possibility for another future, access in the future for maintenance if that was so -- so needed, but was not intended to be a permanent access location for the site.

MR. CUNLIFFE: Looking at the plan, the general slope of the road is to the south. How is the runoff for this road controlled?

THE WITNESS (Parsons): Brad Parsons with All Points.

The runoff for this road is ultimately controlled on the eastern side of the site via the swale and stormwater management basin. The intent of the road as it comes into the site from the Eversource right-of-way and heads to the south is to try and follow existing contours to the best of

our abilities with the exception of one location, which is shown on sheet EC-4, where the road does shift slightly to the east to avoid a couple large 4 rock outcroppings that were surveyed in the field and then turned back to follow the existing contours.

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MR. CUNLIFFE: Thank you. Referring to the response to Interrogatory 56, did the DEEP stormwater division make any recommendations regarding a project construction phasing?

THE WITNESS (Parsons): Again, this is Brad Parsons with All Points. I would say, yes, in -- in essence, DEEP stormwater did make some recommendations with regards to construction phasing, one of those being that we set up some specific construction phasing at the start of the project. And look to ensure that those, that phasing is limited and controlled and that the contractor cannot make adjustments to those, that phasing without having additional conversations with and approval by either DEEP or myself as the engineer of record.

Furthermore, ensuring that the phasing follows the 2002 erosion -- DEEP's 2002 erosion and sedimentation control guidelines which calls

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MR. CUNLIFFE: Yes.

MR. CUNLIFFE:

25 THE WITNESS (Bamman):

This is John Bamman, Senior

for the areas of the perimeter to be cleared first and in -- install the erosion control features such as the sediment silt fence or compost filter socks, and then additionally the sediment basins and any swales to control runoff.

up through a DEEP general permit process as well? THE WITNESS (Parsons): That is -- that is correct. This would either be eligible for -- potentially eligible for a DEEP general permit, or may be required to seek an individual stormwater permit.

MR. CUNLIFFE: These processes would also be followed

I would point out that the draft guidelines issued by DEEP in January of this year for solar projects has been amended as of the middle of October. Those guidelines have now been deemed to be in effect for any projects that submit for a general permit after October 1, 2020.

So we would be applying to DEEP storm water, but due to the new Appendix I guidelines, this project may not qualify for a general permit, but rather may need to apply for an individual permit.

THE WITNESS (Bamman): Mr. Cunliffe?

Thank you.

Project Manager with DSD. While on the subject of phasing I would just like to point out that while our phasing speaks specifically to the chronology of the work being done it doesn't specifically tie to any schedule.

What I'm trying to say is that the -- the primary reason for the phasing is to enable us to stabilize the site during the construction process. What we're trying to do is establish erosion controls and stabilization to the site before we go in and actually start building the project; that is installing the racking, the electrical modules and so forth.

We cannot know certainly what mother nature is going to throw at us next spring assuming we -- we get permitting in time to start next spring.

But it is our intent to, after phase one, to allow the seed mix and the hydroseed that's applied during phase one to take hold and stabilize.

We have built into our schedule a minimum of a month, but are able to extend that, again depending on the climate and the warmth that we experience in the spring. The point being that we will not move forward until we're confident that the intent of the erosion control is being realized to -- to maintain that, that stability.

THE WITNESS (Parsons): And Mr. Cunliffe, I think I

can -- in regards to the general permit or

individual permit, and additionally shedding

some -- some more light on -- on the construction

phasing and even a little more detail.

You know, as -- as I mentioned before this project has been designed to follow the 2002 erosion sediment control guidelines, but one thing this project has also been designed to account for is the full drop in a hydraulic soil group for the sizing and calculations associated with the stormwater basin. That is one thing that actually is above and beyond now what is required in appendix I that was recently reissued. That drop in hydraulic soil group is now only half a drop in hydraulic soil group.

So we intend to keep this design as is to provide additional stormwater controls both during construction as part of our sediment basin and post construction as part of our stormwater management.

Furthermore, in regards to the project itself and some other measures from DEEP stormwater and applying for that, that permit, the project will

also be required to post a letter of credit for the duration of construction and up to the issuance of the notice of termination which is required by the -- by the permit, at which time the project is informing DEEP that the stormwater permit is no longer required and that the site has been fully stabilized.

Furthermore, just to touch on the access routes and -- and swales, and under phase one that it would be critical that we make sure that we are really just focusing on the perimeter of the site with regards to clearing on phase one, and ensuring that all of our sediment and erosion control measures are installed at that time which includes the swales, sediment basins, permanent access routes and our riprap level spreaders.

Exposed surfaces during that phase one construction would be stabilized with either riprap erosion control blankets and hydroseeded with tackifier.

Just to give a note on what tackifier is, it's an additional measure that can be placed into the hydroseed measure that allows for the soil to bind together a little bit more and keep that seed mix in place.

Additionally it -- we'd also like to note that the general permit, and likely the individual permit will require a weekly inspection for stormwater monitoring and erosion controls which would be occurring through all phases of the project from the start all the way through completion. Those, those weekly inspections will occur up to the point in time when final stabilization has occurred after the construction of the project.

so it isn't until all of those measures are installed that the contractor would be able to move on to phase two. So in phase two of the project the remainder of the interior of the site would be clear, would have the trees removed. And the -- those trees would actually flush cut to existing grade. That is one of the things that, you know, we've been in discussion with a little bit more since submittal of the application with some additional contractors.

By doing this we would have notes, and this would help to minimize the overall ground disturbance and you know, eliminate the additional possibilities of -- of erosion.

At that point in time it should be noted that

The contractor would not enter the wetland with any -- any machinery to do the -- I'm sorry.

Would not enter the wetland with machinery (unintelligible) would work from outside of the wetland limit on the south side of the site.

Additionally the contractor would follow the wetland protection plan that was provided as part of the -- the project submittal and guidance from the environmental monitor which is part of the -- the wetland protection plan. So in addition to those weekly SWPPP inspections we would also have an environmental monitor who is assigned to the project and is likely performing additional inspections, whether it be monthly or -- or biweekly or additionally as needed, but most likely on a minimum of a monthly basis.

So upon the completion of the tree removal the contractor will prep the -- the remainder of the site for hydroseed removing any loose brush or leaf items from the -- from the site and proceed to hydroseed the remainder of the site with a seed mixture including tackifier.

Additionally, as in discussions with some of

those contractors DSD is considering some suggestions of modifications to the seed mixtures in steeper slope areas that would allow for faster growth and assist in establishment of those areas even sooner.

Lastly, after -- after that seed extract is installed, compost filter socks will be placed on grade and installed every 70 to 80 feet or so up the slope on the interior of the site. And the intention is for those to remain through construction and possibly even be left in place after construction to completely decompose in place as -- as they're actually intended to be able to do.

In addition to those being on -- on grade, the way that those were actually laid out with the solar panels being turned to face east in this instance on this site and being along the contours -- which was a suggestion of DEEP stormwater group during our conversations with them. We felt that installing this compost filter sock on grade, but also putting it right behind or on top of -- on top of? Up gradient of the racking, that that racking would provide an additional stabilization for the compost filter

sock throughout construction, but also it would actually be out of the way of the contractors doing the racking and electrical installation, because at that point in time it would actually be underneath the panels themselves and right up against some additional racking area.

And as Mr. Bamman mentioned, the project would then be given sufficient time at least a month to look to establish that turf and help minimize and increase root growth before moving on to phase three of the project. And again, those weekly inspections would be occurring throughout that time.

Under phase three the contractor would be installing the solar panels, electrical conduit, electrical equipment and complete the interconnection with United, United Illuminating. Upon completion of the installation of the project's solar components any remaining site work that needed to occur, whether it be filling in a rut, reestablishing some grass seed, repairing any site, elements would be then completed at that time.

But also during that time of construction the contractor would also be responsible for

maintaining all the erosion control elements as part of the project and that would be what those weekly inspections are designed to do, is identify the elements that require repair and/or maintenance. And those items would also be fixed on an ongoing basis. These would be the final. In phase three these would be the final fixes to then establish a final cover on the site.

So the site would, after the hydroseeding, the reminder the interior of the site with the hydroseed on a weekly basis until it has achieved final stabilization which is deemed to be approximately 70 percent grass growth over the entire site. And after that site is finally stabilized then the swales and sediment basins would achieve -- receive a final cleaning and maintenance, and turn them over to a functioning and -- stormwater basin and swale that would occur and remain for -- for the duration of the project.

And would also like to note that the Appendix I, revised Appendix I has -- does require that the site be monitored on a monthly basis for a period of two growing seasons prior to the issuance of a notice of termination of -- of the permit by DEEP as well.

And I think that's -- that goes into and covers a little more of the phasing items as well.

THE WITNESS (Bamman): Mr. Cunliffe, this is John Bamman, just to perhaps piggyback on some of Brad's comments.

As Senior Project Manager for this project
I've been involved with the development team in
the design and engineering of this project. From
its early inceptions we made many modifications
based on feedback from DEEP in terms of reducing
the size of the -- the system, reorienting the
rows of modules to cross grade as opposed to
perpendicular or angled to the grade.

We also removed a number of rows of modules from the steeper areas so that we're, for the most part, building on a 15 percent or less grade.

There's -- there's no question that when we first looked at this site, it is a challenging site and we took great care in looking at the -- the problems that need to be addressed particularly in -- in regards to stormwater management.

My -- my undergraduate degree is in geology and I, I looked at a lot of glacial till and weathered rock in upstate New York for more days

than I want to remember. So I'm -- I'm very familiar with the geology of the site buttressed by the six borings that we did in our geotechnical analysis.

In my 17 years of building ground-mounted systems I've come to realize that understanding the geology is just the beginning, and that it really informs means and methods to work the existing geology so that we're not fighting mother nature, but more becoming a partner with her to -- to control what the glaciers 14,000 years ago weren't really considering when they -- when they withdrew.

So as such I feel very much a part of this project, and once construction starts I will transition to construction manager and will be on-site 24/7 during the construction process.

We've talked a lot about what the contractors will do and what -- what their responsibilities and their scope of work entails. It's one thing to sign a contract with a contractor. It's another thing to make sure that he does what he's supposed to do, and that's the responsibility of -- of on-site construction control and something that I'll be taking very personally and

very specifically during construction.

I think it's valuable also to note that DSD is different than a lot of petitioners that perhaps have come before the committee. In contrast to others, and specifically with this project, this is -- I guess we call it a cradle-to-grave project inasmuch as we -- we signed the lease for this property initially. We've -- we've applied for an interconnection agreement with the utility. We've designed, engineered it. We will be subcontracting but managing throughout the construction.

And in fact, we will be owning this project for the 20, 25 years of its life. So we're not going to be building this and slapping each other on the back and moving on. We will be becoming neighbors to the abutters in -- in the area in Hamden. And certainly it's been to our benefit and to their benefit that this is built in a sustainable way, that it -- it manages the storm water and the environment as we claim it will, because we're -- we're not going anywhere.

So I think that's an important thing to consider as you evaluate our petition.

MR. CUNLIFFE: Thank you very much.

1 Mr. Parsons started his answer off with some 2 soil groups and some categorizations that allowed 3 certain calculations to happen. And in concert 4 with those calculations is the entire solar array 5 considered impervious for purposes of these prior 6 calculations? 7 THE WITNESS (Parsons): This is Brad Parsons. The 8 entire solar array is -- is not considered 9 impervious for the total of the calculations. 10 That is not a requirement of -- was not a 11 requirement of the guidance, and -- and is also 12 not a requirement of Appendix I. 13 The solar panels are considered impervious 14 for the purposes of calculating water quality 15 volume associated with the site. 16 MR. CUNLIFFE: Thank you for the clarification. 17 In reference to response to Interrogatory 18 Number 58, Part C, approximately how many acres of 19 the solar field area are located on slopes between 20 15 and 20 percent? 21 22 (No response.) 23 24 THE REPORTER: This is the reporter. Just to confirm,

I don't hear any speaking.

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THE WITNESS (Parsons): Sorry. This is Brad Parsons.

That is correct. That is an answer I will -- we will have to get for you, but it is -- it is minimal. We specifically looked at installing the solar panels on grades of 15 percent or less.

- MR. BALDWIN: Just for clarification, Mr. Cunliffe, to make sure we get the homework assignment right you're talking about question 58C, and just some percentage to back up the minimal statement in the response. Is that correct?
- MR. CUNLIFFE: Yes. We just wanted to see how many acres in the 15 to 20 percent slope would be developed?

On the topic of the 30-day stabilization period, who would be the person to determine that the area is sufficiently stabilized prior to the construction phase?

THE WITNESS (Parsons): This is Brad Parsons. I think it would be -- likely it would be myself. I would be the one looking at that. Again, I just want to point out that that 30 days is not intended to achieve what we would consider final stabilization, but enough stabilization where the seed has been able to take hold and germinate which will allow that to continue through the

phase three construction.

There's -- there's the understanding that some areas of that will need to be repaired upon completion.

MR. CUNLIFFE: Thank you. Response to Interrogatory
42B stated that there would be some clearing and
grubbing, and then Interrogatory 62 stating that
there would be root systems in place.

At least you've already testified,

Mr. Parsons, that you are now planning to cut

flush to clear the trees and not disturb the root

system?

THE WITNESS (Parsons): This is Brad Parsons. That is correct. We are. We are intending to cut the trees flush and not disturb the root system. What I will state is the term "clearing and grubbing" is -- is kind of broadly used in some regards, and especially with regards to -- we are still going to need to somewhat clear and grub the site with regards to making sure that all, as I mentioned the leaf litter and any other areas are cleaned up to -- to take the hydroseed.

MR. CUNLIFFE: And I would imagine in locations such as the roads or/and stormwater control features would be subject to that?

THE WITNESS (Parsons): Correct.

THE WITNESS (Bamman): Mr. Cunliffe? John Bamman again. If I just may add a little detail to the tree removal decisions that we've made? Generally in ground-mount solar installations during the -- the tree removal the trees are -- are cut and then the stumps are removed, and that's primarily because over the life of the solar PV system stumps left in the ground tend to rot, decay, causing holes that then make it difficult for subsequent servicing and maintenance of the system.

We've determined that based on the geology of this particular site -- and we've -- we've been there quite a bit -- is they -- the amount of glacial till and cobbles as well as small boulders that exist throughout the site, and again as I mentioned earlier, supported by the borings and the geotechnical analysis that was done.

The topsoil layer and forest debris is only about twelve inches think on average throughout the site.

So it's our feeling that the benefits to leaving the stumps in place, as it would mitigate further erosion and stormwater issues, would not

1 create the kinds of holes as they decay only because the topsoil layer is so, so thin. And 2 3 actually if -- if you were to walk the site there 4 is trees that have blown down and it's very clear 5 that the root -- root systems to these trees are 6 all very shallow. They're really being nursed by 7 that top, top layer. 8 So again, it was -- it was something that we 9 kind of batted around and really think that this 10 is the way to go in terms of reducing and 11 minimizing the disturbance during the site 12 preparation. 13 MR. CUNLIFFE: Since the submittal of the responses to 14 the Council's interrogatories, has SHPO provided a 15 response to the petitioner? 16 THE HEARING OFFICER: Mr. Gustafson, you're on mute. 17 THE WITNESS (Gustafson): Is this any better? 18 THE HEARING OFFICER: Yes, thank you. 19 THE WITNESS (Gustafson): Okay. My apologies --20 (inaudible.) 21 MR. BALDWIN: We just lost you again, Matt.

THE WITNESS (Gustafson): How about now? Okay. All right. I seem to have worked out the coordination between the computer and my phone. My apologies

The same thing. You're muted.

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MR. CUNLIFFE:

for the -- the delay. To responding again, at this time we have not received a response from SHPO. It has exceeded the 30-day window that's required.

But to answer your question, no, we have not received a formal response yet.

- MR. CUNLIFFE: Referring to the Department of Health letter dated September 8, 2020, does the petitioner intend on adhering to all the recommended mitigation measures?
- MR. BALDWIN: Just for clarification, Mr. Cunliffe, we're talking about the September 8th comments from Public Health?
- MR. CUNLIFFE: Correct.
- MR. BALDWIN: Okay. This might be a combination response from Mr. Gustafson and Mr. Parsons.
- THE WITNESS (Gustafson): This is Matthew Gustafson. I
  think I'll start the response by saying, portions
  of that letter that state our referenced fuel and
  hazardous materials, containment and remediation,
  and those such comments are addressed.

And the petitioner will adopt -- and are currently adopting as part of our proposed resource protection plan there is a section under that that is specifically -- the specific intent

is for spill containment and prevention.

In addition, the petitioner is willing to allow the RWA personnel to periodically inspect the project after construction or during construction. And certainly the petitioner will be willing to notify them and make sure they are aware of the start of construction and -- and key phasing of the project.

THE WITNESS (Parsons): And this is Brad Parsons. I -again, there was a comment about erosion
sedimentation control should be in place and
properly maintained as necessary during
construction. Those items would occur as required
by CT DEEP in the stormwater permit.

And additionally the Petitioner has reached out to the RWA prior to starting this project to -- to review that scope, but has yet to have -- have a meeting with the RWA on that.

MR. CUNLIFFE: Thank you very much.

That concludes my questions, Mr. Morissette.

THE HEARING OFFICER: Thank you, Mr. Cunliffe.

We will now continue with cross-examination with Mr. Harder. Mr. Harder?

MR. HARDER: Yes, thank you.

Just one preliminary question. I've heard

and we've read, I think, in several places references to the anticipated life of the project; I think anywhere from 20 to 35 years.

Could someone provide a little bit of clarification on that, or hopefully a lot of clarification on that, you know, what the anticipated life is?

THE WITNESS (Gabor): This is Matt Gabor from DSD. I can talk a little bit about the project length.

So typically the inverters can last for, you know, up to 20 years, but I believe the tariff and virtual metering program are limited to that 15 to 20 years. So it is possible for the project to go on longer, but typically the equipment starts to degrade. It's not, you know, as efficient as when it was installed.

MR. HARDER: So are you saying -- and perhaps you can't say with absolute certainty, but it's likely that the project won't go beyond 15 to 20 years?

THE WITNESS (Gabor): That is correct, but you know, it just depends on -- we don't have a crystal ball, so it's -- it's tough to say with certainty.

MR. HARDER: All right. Okay. Most of my questions and comments, I guess, relate to concerns regarding erosion. One quick question that kind

of gets into that a little bit -- I'm assuming that, and I think perhaps you indicated in the petition, that the proposal is for those areas of the project site where the trees will be removed. The trees, the felled trees will either be chipped or removed in pieces from the site.

Is that correct?

THE WITNESS (Parsons): This is Brad Parsons. That is correct.

MR. HARDER: Does that apply also to wetland five or any wetlands where, for example -- and what I'm getting to is in response to Interrogatory Number 42D. You indicated that if machinery cannot reach into a wetland it would be hand felled.

And I guess my question is, if the missionary can't reach in to cut the tree would it be removed by hand? Cut up and removed by hand, I guess? Or would it be left there?

THE WITNESS (Parsons): This is Brad Parsons. Wetland five is the only wetland where the trees would be removed. And wetland five's dimensions, while I don't have them off the top of my head, it is a fairly small wetland.

And any trees that may need to be cut and fell would fall out of that wetland and main --

mainly be able to be cut up and be removed from outside that wetland and --

MR. HARDER: Okay.

THE WITNESS (Gustafson): This is Matt Gustafson.

The -- the acreage of wetland five is approximately .05 acres, or 2,500 square feet. And the geometry of that wetland is exactly as Brad had mentioned. A feller buncher that would typically be used to clear rest of the facility would likely be able to reach in and remove the few trees that are located within wetland five.

In the provision that the feller buncher doesn't feel like it can safely reach in there without potentially tracking into the wetlands, crews would be required to hand fell and similarly hand cut up the trees to remove them, or any other method that similarly does not require machinery to track within the wetlands so that we minimize ground disturbance and that no ground compaction occurs within that wetland resource area.

And again, that is exclusively limited to wetland five.

MR. HARDER: All right. Okay. Thank you. I noted that the original plan, or one of the original plans showed the diversion swale around the entire

west side, the entire northern side and part of
the east side. And I believe now it's shown just
around part of the north and eastern sides of the
project area. Why was it changed? Why? Why was
the change made? Or what allowed you to make the
change, I guess?

- THE WITNESS (Parsons): This is Brad Parsons with All

  Points. That design was a design by a previous

  engineering firm. So unfortunately I can't really

  attest to -- to how that was thought up, but --
- MR. HARDER: But you're saying now that no swale around the western side is needed? Or is it just something that's different?
- THE WITNESS (Parsons): That's correct. This is Brad

  Parsons. I don't believe that the swale along the

  western side is needed. All the water will sheet

  flow, continue to sheet flow over the site to

  reach the swale on the eastern side or the

  stormwater basin.
- MR. HARDER: Okay. Thank you. In response to

  Interrogatory 63, it indicated that proposed

  swales were designed to minimize cut in, and I'm

  trying to envision what that means. I assume that

  means that at least for those areas where there

  would be no actual cut in, or it would be

minimized perhaps.

That some of the swale structure, I guess, would be accomplished by construction or adding fill above grade, to construct it above grade.

Is that correct?

THE WITNESS (Parsons): Yes, that is correct. So what the plans and the grading intended to do here was to cut in a little bit and basically look to try and balance the -- the swale cut and fill. So on the downstream side we do have a slight berm in most cases to assist with ensuring that stormwater controls stay within the swale.

MR. HARDER: All right. So in the process of constructing those areas where it's an actual berm above grade or some, some part of it above grade, that would have to be stabilized similar to, maybe even more so because you're going to be collecting running water.

But you know, one of the important considerations there is appropriate stabilization of that feature so it doesn't just erode away or it doesn't, you know, promote erosion?

THE WITNESS (Parsons): This is Brad Parsons. That's correct. That the swale is being proposed to be lined with -- with riprap stone that will not only

prohibit erosion of the swale, but will also help to control velocities in the swale as well.

MR. HARDER: Thank you.

THE WITNESS (Bamman): Mr. Harder, if I may just interject? John Bamman with DSD.

In the discussion of cutting into the -- into the slope for installation of water management's features and -- and roads, it's important for us to note that it's challenging as this site may be in terms of slope and geology and so forth.

There is one very positive factor and that is that the contours of the -- of the site are very gradual. And though on the vast majority with the exception of the roads and sediment basin and so forth there will be no cutting and filling and that will also go a long way to mitigating erosion and -- and runoff. I just want to interject that.

MR. HARDER: Okay. Thank you. Actually that that raises one of the questions I had about excess material, cut material. I think it did say, and perhaps it was -- this material was this, that which will be removed from road areas.

But there apparently will be an excess of -I forget how much it was. Maybe 1500 yards or so
of excess cut material. And one of the possible

means of dealing with that is to spread it on site. Is that correct? Is that still being considered?

THE WITNESS (Parsons): This is Brad Parsons with All Points. That is -- so that is correct. With regards to the amount of cut, we did our best to -- we always do our best to try and balance sites wherever possible. That helps to reduce truck traffic and -- to the site to remove and/or import fill.

In this case, due to the way we needed to do sizing and proposed the basins, we did end up with a net cut of approximately 1500 yards. We do have the landscape berm that is on site and being proposed. That volume I don't believe is included within that, that total volume there. Or it is a possibility that we could increase the height of that berm slightly as well to lose the remainder of the -- the fill on site, but any excess material would likely be trucked off.

MR. HARDER: Okay. Thank you. Let's see. It's indicated, I believe, that in the petition that -- I think the temporary access roads are proposed to be 15 to 16 feet in width, but the existing 12-foot road is adequate.

Could you explain why if the existing road of 12 feet is adequate why you need to go to 15 to 16 feet on the temporary access roads?

THE WITNESS (Parsons): This is Brad Parsons. The intent there was to go a little wider once we got into site. To enable traffic to pass by each other there's going to be -- while there will be traffic in and out of that road that is existing twelve feet wide, there will be more activity on site itself.

And so the intent there was to try and provide a little more width and a little more room and access along that road internal to the site.

- MR. HARDER: So you're saying it's needed to allow vehicle passage. I mean, is that really it, to allow safe passage?
- THE WITNESS (Parsons): It's just there to provide -to provide additional area and additional width
  for construction. Correct.
- MR. HARDER: Okay. I'm just a little confused. In your response to Interrogatory 56 you said, based upon DEEP input you rotated the proposed panels to be perpendicular to the existing topography. I'm assuming you meant perpendicular to the slope.

And I was trying to envision what you meant,

and if it was previous to -- the original proposal was that they, you know, so that the drip edges were parallel to the slope.

Does that mean that after they are rotated so the panels, the drip edge, I guess, is perpendicular to the slope that they're facing? Given the nature and the topography of the site they're facing more so to the east compared to previously when they might have been facing more to the south which would have resulted in the drip edges being, you know, parallel to the slope? Is that correct? Or am I not envisioning it correctly?

THE WITNESS (Parsons): This is Brad Parsons again. So

I'm reading the response to question number 56.

And I believe on line -- on line six where it says
that DEEP expressed concerns for that sentence
there with the existing slopes on site and the
orientation of the array at a zero azimuth.

In respects to stormwater runoff due to the proposed effects being, instead of parallel, that should be perpendicular to existing topography. So originally the first few iterations -- and even the first iteration I believe you referred to that we were not involved with -- all had the solar

panels at a zero-degree azimuth.

There has been some talk and concern about -about drip edge. There is -- it's important to
know that these, these panel systems are open
systems. There's at least half an inch, sometimes
an inch, sometimes more of gap between each panel
on each row. So it doesn't function as a roof
would in that sense. So water is going to flow,
hit the panel, is going to flow off that panel
down through the interior of the array.

Again, the panels are -- follow the contours of the grade. So they all -- the water will drip off at multiple different locations along the edge of the panel specifically. So the concern with the drip edge is there by some people, however I -- we feel that it is not a major concern, but DSD will make the production numbers work with making this azimuth rotation to now take the drip edge and have that drip edge being parallel to the contours.

And so that was the change. So rather than the panels pointing due south where they would receive the -- on a -- I believe we noted in here approximately 72.6-degree azimuth. So essentially the panels are pointing due east and will receive

most of their production throughout the early and -- mid part of the days and will not receive as much production during the late, late day hours.

MR. HARDER: Okay. Thank you. I appreciate that explanation. How much did that result in a change in the power production, in the anticipated power production from the facility, if any?

THE WITNESS (Gabor): This is Matt Gabor of DSD. We can come back with firm numbers, but it was, I'll guess around 5 percent of a decrease.

MR. HARDER: Okay. Thank you. I actually was thinking it would have been more, but that's good.

I guess the last comment and question, again it gets back to erosion concerns. And a few things, I'll mention a few things.

One also making reference to the Town of Hamden Wetland Commission letter, the comment they made and with their concern about separating distance from some of the wetlands and buffers; and in at least the general recommendation that steeper slopes typically call for adherence to more extended buffers -- but that's not really the case here.

And also, you know, the provision for a

minimum of one month's stabilization time. That that concerns me, I guess. You know, I always wonder what -- the term "stabilization," I always wonder what, what definition of stabilization people have in mind.

I think it probably means somewhat different things to different people and I think it -- maybe it was Mr. Parsons that elaborated on it a little bit, but I was a little concerned by what he indicated that it sounded like in it's as much a condition of emergence of the cover crop.

And so that you, you would still -- and I think you mentioned also there, there would be need for repair in some cases. And I'm just concerned that after only one month in many, especially on these slopes, that a lot of the site wouldn't be stabilized enough to warrant proceeding with construction and, you know, to really protect against significant erosion problems in the event of significant storms, which obviously we have and we've seen in some other situations, solar farms or other situations in general, construction sites.

So I'm hoping that someone could discuss that a little bit and respond to my concern. I know

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I -- maybe I haven't asked a specific question, but you know that generally the erosion potential for this site is probably my largest concern, and I'm hoping somebody could address that.

MR. BALDWIN: Mr. Harder, this is Ken Baldwin. Just to make sure that we get responses to your questions first, first it was regarding the wetlands and the setback issues. I guess that's probably best for Matt Gustafson.

And then on the stabilization issue, we'll go back to Mr. Parsons and Mr. Bamman.

MR. HARDER: Thank you.

THE WITNESS (Gustafson): This is Matthew Gustafson for the record.

Regarding wetlands and, I guess, the general concern of the limited ballpark distances to some of these resources, there is kind of a dual discipline response here, but I'll -- I'll take a crack at both of them. And perhaps Brad can fill in where either -- and elaborate where needed.

But again, we have some -- we do establish buffers to four of the five on-site resources. Wetland five is the exception to that where we do -- or are proposing clearing within that wetland. However, it should be noted that the

minimum buffer distances established are to the limits of clearing and not necessarily to the nearest physical disturbance of the ground.

As we have kind of reiterated a number of times, the overall disturbance to the ground aside from the formal tree removal will be limited. And we certainly have taken painstaking efforts to minimize the need for grading that potentially could result in a large-scale disturbance on the site resulting in -- in washouts to any of the approximate wetlands.

The smaller buffer distances proposed on this site that are -- are somewhat potentially concerning are mitigated by the fact that most of these resources, certainly three out of the four; wetlands one, five and four are isolated features that do not support wetlands functions or values at any level, at their principal or secondary level.

And certainly not to say that protection of those resources is not a high priority. I think we've illustrated in our petition filing through the establishment of a wetland protection plan and the measures therein that we are taking the protection of these resources very seriously.

Wetlands two and three that are somewhat higher-quality wetlands that have experienced significant historic disturbance, thereby diminishing their function and value; it comes similarly, again diminished to the other on-site wetland resources. So because of those reasons we felt that large buffers to these wetlands in combination with the very comprehensive erosion and sedimentation control plan that we have proposed was not necessary.

Where feasible we have maximized buffer distances and certainly to the wetlands that are of slightly higher-quality, those being two and three, we have slightly larger buffers. And certainly, the area that you see with the smallest buffers to, wetlands four, one, and in the case of wetland five no buffer, those are the wetlands that have probably the least functions and values provided on site.

Hopefully that addresses some of the concerns
I think you were trying to get at, but certainly
if there's any follow-up questions I can try to
flesh out any concerns you may have beyond that.

THE WITNESS (Parsons): I think, Matt -- this is Brad
Parsons -- one thing I would like to just add with

regards to -- to wetland three as well, mainly
the -- the disturbance inside of the upland review
area associated with wetland three is as a result
of the grading of the swale and stormwater
management basin, which I'll touch on there, their
functions during the construction piece of things
to -- to answer your question, Mr. Harder, on
that.

But one of the other pieces of this is, we did also look at -- at locating the outlet for that stormwater basin outside of the upland review area as well. So if, you know, reviewing our plans, the swale and majority of the -- almost all of the site that drains to that stormwater management basin drains into the basin, is held into the basin and is ultimately discharged outside that upland review area.

So providing some additional protections we could have slid -- just by sliding the -- that outlet control structure another 20 to 30 feet to the north, which there is plenty of room to do there if -- well, it would have caused us to be within that upland review area.

So by keeping that outlet structure as far to the south as we were, we were able to discharge

outside of the upland review area to allow that flow to head back down where it goes today. All of that water comes down the hill and enters wetland three before ultimately entering a culvert and/or overtop -- overtopping the road and entering on the unnamed intermittent watercourse to the east.

Furthermore, just to touch base on your questions with regard to the erosion on-site -
THE HEARING OFFICER: Thank you, Mr. Parsons, I'm going to interrupt you here for a second. I've kind of held off calling a break. What I'd like to do is call a ten-minute break. We'll come back at 3:55 and we'll continue with your response to Mr. Harder's question. So let's do that.

Unfortunately, I've waited a little longer than I would have liked, but let's have a ten minute break and we'll continue at 3:55.

(Pause: 3:45 p.m. to 3:56 p.m.)

THE HEARING OFFICER: Mr. Parsons, thank you for letting us take a break and interrupting your response. If you could, please continue responding to Mr. Harder's question?

THE WITNESS (Parsons): Not a problem. Again, Brad

Parsons. Just looking to respond further to

Mr. Harder's questions here. And by all means, if

I miss something please let me know.

But I think, you know, the next step we were going to discuss the concerns with erosion, but I also kind of want to tie in the stormwater basins, because it helps from an erosion standpoint as well as from a post-construction stormwater management control.

so really the main piece of -- of this is -- and your concern with erosion is partially going to be in the phasing, which I think we discussed in a little more detail earlier.

And the question with regards to the 30 days of stabilization, maybe it shouldn't necessarily be referred to fully as stabilization, but rather as I was discussing just establishing growth and establishing -- allowing that grass seed to establish, or start to establish a root system. Once that grass seed has started to establish a root system and growth, even though construction vehicles may travel over the top of it or it may get somewhat disturbed during construction, as long as, you know, when it's not dug up and just

maybe passed over, it has a very -- a better chance of coming back a lot more quickly after that construction period is over.

So the intent of that delay is not to, I would say, get a full establishment of the site in full growth, however but to start the growth and to start that process. Because by doing that it is going to allow for a speedier growth even at the end of the project, and a speedier chance to reach that final stabilization.

The other real -- or another good real reason to provide some of that, that stabilization during that phase two time period is once we -- once the racking for the solar panels are installed you're -- we're really limiting the amount of construction traffic and -- and items that can -- can really occur, because you have a physical impediment.

While that physical impediment being there will alleviate a lot of construction traffic over, give or take, you know, 50 percent or more of the site, well, that's going to allow that grass to continue to establish and continue to grow while the remainder of the modules are being put up and installed, while the electrical wiring is -- is

being done.

So those things will -- it's another benefit of doing that seeding in an earlier process and giving that that time to establish.

The other thing I'd like to point out here that's probably a little bit different than you may have seen in some other solar installations, is by turning the panels themselves to be parallel to the contours we're also using the contours of the slope to the advantage of the system because we're on a, what I'll call, a positive slope for solar.

We are basically -- the slope itself is facing towards the east. So it is facing towards where we're looking to get our -- the project is looking to get its most production out of.

As a result of facing that direction the inner-row shading -- because as you move from the bottom, or what I'll say, the east of the array and you move to the west side or up the slope, your shading between those rows decreases.

So we were -- in order to still maintain production on the site those rows facing -- was decreased significantly. And I believe we're down to eight feet on our inner row spacing -- yes.

We're down, we're down to eight feet.

Thanks, Matt.

We are down to eight feet on our inner row spacing. I bring that up because what it's also going to do is -- is limit the amount of traffic that once the panels and racking is installed the amount of vehicular traffic that is going to really be able to travel through the site is going to be severely limited.

So mainly things will be moved around site using a -- most likely a skid steer, a small, mini-track piece of equipment that has the ability to transport materials on site. The benefits of using those types of equipment is that's the same type of equipment you would want to use on a construction of a landfill.

It is going to reduce the overall pressure on the site, but it ultimately disperses its load better which therefore it's going to cause less disturbance overall. So some of those factors in -- is why seeding this site in that interim, and even the 30 days, you know, whatever we're able to give it is going to help long term and is going to help even short term from a stabilization and erosion control standpoint.

Additionally, those compost filter socks on grade -- on contour backed up by the racking themselves will provide that additional control.

Furthermore, we've got our swale and our basin on the downslope side of the site. The stall of the swale and the basin, while they're for permanent stormwater controls, they're also for temporary erosion control measures.

So while we're not installing these to -let's put it this way. Erosion control measures
from a sediment trap, a sediment basin, if they
were specifically just installed and/or designed
for that, are really only designed for a ten-year
storm event. So in a temporary situation there
would be expected sometimes that those, those
facilities would have the ability to still
discharge some water because they're not designed
for a-hundred year storm event.

In this case, in this specific spot we are using our permanent stormwater controls to also handle our temporary measures. So our swale that is on the eastern side of the site is capable of handling, actually handling the -- the hundred-year storm event. It does reach the top of the swale, but the hundred-year storm event

will pass through the swale, the proposed swale itself and reach the stormwater basin to the south. The stormwater basin to the south is designed to mitigate peak control for up to the hundred-year storm event.

So that control will be in place for the duration of construction and prior to any items occurring upstream. So you take all of those factors into account in the additional pieces of DSD being on-site and having an on-site construction manager, the weekly monitoring, ensuring that the contractor is -- is following his -- the construction sequence is supplying means and methods, and is communicating on -- on a consistent basis. All of those things are -- are important.

That being said, is this a challenging site?

Of course it is. It's been challenging from day one, but we have been able to mitigate it. Just as the, you know, construction of the subdivision to the south occurred on the same type of slope, same type of property, that was able to be installed and -- and functioning as it is today.

So by us, you know, installing these stormwater measures on the eastern side of the

site, I do believe that those controls will actually help to relieve some of the flooding that -- that Gaylord Mountain Road receives today.

I believe you will probably hear, and if not, have heard that -- that wetland three does receive a good amount of water, and that at times it has overtopped the road because there is only a 15-inch culvert that leaves the east side of the site and heads to the intermittent watercourse on the eastern side of Gaylord Mountain Road.

And by the stormwater basin being installed both during construction and remaining after construction, in controlling the pre versus post runoff to -- the post runoff being west, and the pre-runoff, that the timing and the amount of water against wetland three will be adjusted.

And there is the likelihood that with the installation of this stormwater management basin that is also designed to handle a drop in one hydraulic soil group, it will help reduce and help any flooding concerns that are on Gaylord Mountain Road.

MR. HARDER: Okay. Thank you. I appreciate that information. That's helpful.

Just two very quick followups on what you

mentioned. The eight-foot separating distance
between the panels, that's edge to edge, the
upslope edge of the lower one to the downslope
edge of the upper one, basically?

THE WITNESS (Parsons): That is correct. This is Brad Parsons. Yes, that is correct.

MR. HARDER: Okay. And also you mentioned, I guess, once the racks are installed, you know, that that will, I guess, represent -- or that will, you know, result in kind of a restriction of activity, vehicular activity.

What period of time do you anticipate will it take to install all of the racks? Or get to that point where that, you know, that restriction of activity occurs?

THE WITNESS (Bamman): Mr. Harder, this is John Bamman with DSD. Let me chime in here. Racking, where we're planning to use a ground screw installation due to the large quantity of cobbles and boulders and so forth on the site, where we'll be actually using a screw that is first predrilled into the -- into the geology, and then a screw, an eight-foot long -- it looks like a large wood screw is screwed into the ground.

That process for a site this size will take

about two weeks, but while those screws are going in, right behind installation of the screws, the racks themselves which are inserted into the screw and fastened to the screw occurs, as I say, right behind the screw installation.

So the -- using Brad's term, the impediments to travel down the slope will be in place probably within a four-week period. After, at that point all servicing, all -- all construction travel will be across the slope parallel to the contour lines so that any -- any destruction to the -- to the tackifiers and seed mix that is now germinating will -- will be in a cross -- cross-slope direction, you know, minimizing any potential for -- for sheeting downslope.

MR. HARDER: Okay. And maybe this is for Mr. Parsons, but the filter socks -- as soon as the racks are installed are the filter socks installed after that so there they're backed up by the racks? Or are they installed prior?

THE WITNESS (Parsons): So this is Mr. Parsons. They are installed prior, actually. So those will be installed right at the same time that the site is receiving the -- the hydroseed and -- and tackifier. But they will be -- they will be

surveyed to a point where the ground screw can be installed without needing to -- to remove those compost filter socks.

And if they need to be -- to be slid, you know, a few inches one way or the other that is, you know, to the -- to be out of that way, that that's the intention of being able to use those because they can be moved around a little bit more.

MR. HARDER: Yeah. Okay. Thank you. And also one last thing just to clarify back to my discussion on the upslope, the western side where there was originally a proposal for the drainage swale.

From what you're saying I gather what you mean is there's going to be no disturbance, I guess, where the drainage swale was originally proposed in that area. So it will be just natural sheet flow, I think you mentioned, but without any ground disturbance to change whatever occurs there now.

THE WITNESS (Parsons): That -- this is Mr. Parsons.

That is correct. The intent was to try to

maintain a sheet and show concentrated flow over

the site. We do have the proposed construction

road that will be going in on that, that western

side, but the water will sheet flow over that as well.

And the concern that I -- to be honest, that I saw with -- with adding a swale to the western side of -- of the site is you're now channelizing storm water. So you're taking the ability for the ground to function and -- and naturally control stormwater runoff. While this in its final condition will no longer be a wooded condition, I would like to say that it is, you know, the solar array will turn into more of a meadow condition.

It is not intended to be a residential manicured green lawn that is fertilized on -- on a consistent basis. That is not the intent here.

It's not what DSD is planning. This will function as a meadow. It will be moved two to three times a year. Maintenance will be limited to when it's required.

So again, by -- by installing any additional controls on the -- on the west side, you know, it's actually going to increase runoff and actually speed up the controls because you're -- you're channelizing water and getting it to its final location faster.

MR. HARDER: Okay. Yes. Thank you for that. I had

the same exact concern. That's why I was asking those questions. Well thank you, Mr. Parsons, for that information.

And that's all the questions I have right now, Mr. Morissette. Thank you.

THE HEARING OFFICER: Thank you, Mr. Harder.

MR. BALDWIN: Mr. Morissette?

THE HEARING OFFICER: Yes.

MR. BALDWIN: Excuse the interruption, sir, but there was a question earlier on in Mr. Harder's cross-examination that I think I would like to have our witnesses get back to, because it was still a little confusing to me.

so if Mr. Gabor and Mr. Kapur could address -- this is the issue of the project life and the contract term, and the issues revolving around those two issues. So if I could ask them to expand on that I would appreciate that time.

Thank you, sir.

THE HEARING OFFICER: Certainly. Please proceed.

THE WITNESS (Kapur): Yeah, this Amol all from DSD.

I'll start that. So the difference between the 20 and 35 years that we made mention of is the contractual term that we have for the lease. So our ability to stay on the property is for 20

years. It contains two 5-year extensions as well, which would take us to a 30 years iteration for the lease agreement.

There's also another agreement, a 20-year virtual net metering agreement and that's our ability to sell the virtual net metering credits to a state entity. That agreement also had a 5-year extension which would take you to 25.

Now as a business we assume the operational life of a solar asset to be roughly 35 years. So you've got a bit of a gap between the 20 and the 35. Market conventions typically allow, or typically force us to -- to have our contractual terms tied to the -- the underlying program in the state.

And so those agreements are 20, 20 years with the ability to extend, and it's our intention and our expectation that the -- the asset would last for at least 35 years. Thank you.

THE HEARING OFFICER: Thank you for the clarification.

Anything else, Attorney Baldwin?

MR. BALDWIN: No, I think that's the clarification we were hoping to make. Thank you for the accommodation, Mr. Morissette.

MR. HARDER: Mr. Morissette, this is Mike Harder. Just

1 a follow-up question on that point? 2 THE HEARING OFFICER: Sure. Continue. 3 MR. HARDER: Not knowing the industry and how these 4 things work at least in terms of these contracts 5 and extension opportunities, would you say that 6 it's normally only in extraordinary situations or 7 for extraordinary reasons that the extensions are 8 not granted, or are not utilized? 9 THE WITNESS (Kapur): This is Amol from DSD. 10 least in my experience, in our business' 11 experience extensions are -- are typically 12 expected. And so they're typically a pretty, as 13 you said, extraordinary event that would -- would 14 not force you to extend the lease through the 15 subsequent power agreement. 16 MR. HARDER: Okay. Thank you, I appreciate that. 17 That's all I have. 18 THE HEARING OFFICER: Thank you, Mr. Harder. 19 We will continue with cross-examination with 20 Mr. Hannon. Mr. Hannon, please? 21 MR. HANNON: Okay. I'm just trying to figure out how I 22 want to start. I've written down some comments based on the testimony today. So I think I'm 23 24 going to start there before I actually go in and 25 deal with some of the documents.

For this project is there a drop-dead date contractually by when you would need to be up and running?

THE WITNESS (Nicolas): Hi. This is Jenny Nicolas with DSD. At this point in time the drop-dead date that we have is due to our L-REC performance assurance. And so we would need the system to be up and running by January of 2022. Yeah.

MR. HANNON: Okay. Thank you. This is just sort of a general question. A comment was made earlier that there's, like, an eight-foot interspacing between the rows. We've had people make presentations to the Council in the past that that's not really a sufficient amount of space to maintain good growth of grass, or whatever type of material is being planted to help stabilize the site.

What do you say to that?

THE WITNESS (Parsons): So this is Brad Parsons. In this case with the direction that these panels are being rotated and the fact that we are facing more or less due east, what will happen along with the additional tilt that -- that's here is the, instead of, like, when they're facing normally to -- to the south and you're getting some of that, you know, passing of the sun to, as I said,

to the south of the array, the sun is actually going to pass over the array here.

So in the afternoon hours that sun is actually going to shine almost behind the panels and -- and be able to provide some light and -- and nutrients from that standpoint there.

Additionally I'll say, you know, this year was an exceptional drought. And I can personally say that my yard looked a lot better where I had trees and -- and shade versus not having shade at all. So I do believe that that growth will still continue underneath those panels in this case.

MR. HANNON: Okay. Thank you. I just wanted to get something on the record for that.

I think Mr. Harder brought up the compost filter sock. They're supposed to be installed, I believe, it's like at a distance of about 75 feet apart.

My question is, is that a one-time deal? Or is that something that you'll need to be replacing periodically throughout the life of the project?

Because typically those can be left in place. The compost is a nice natural ingredient, but they also break down over time.

So I was just wondering if this was a

one-time deal when you start construction, or whether or not they would be replaced throughout the life of the project?

THE WITNESS (Parsons): So this is Brad Parsons. The intent right now is to install them the -- the one time and -- and leave them there with the understanding that the stormwater permit would not be able to receive its notice of termination unless the site is -- is stabilized and -- and no active erosion is occurring.

So does, you know, I think the -- and we've all agreed that there's really no reason to remove those and being able to leave them for an extended period of time is -- does have some benefits.

There's no negative do it.

Adding more later, I'm not sure if you're not seeing any -- if there's no erosion on site the -- the need for those types of controls is not really there. That being said, it doesn't mean that it -- it couldn't be something that is -- is looked into further.

THE WITNESS (Bamman): John Bamman. If I might just add to what Brad just said? In our experience, of course, depending on climate we oftentimes find there, a grass growth under the panels -- than we

do in the inter-row area. You know, per Brad's observation on his -- on his lawn and property, the shading because these sites are not irrigated. The shading in certain, as I say, climates and certainly with the summers we've had we would expect that the grass growth will actually be improved underneath the -- underneath the panels themselves.

With regard to the filter socks, you know, we routinely install these to -- to help with erosion control during construction. By the time they break down our -- our grasses will be -- probably have mowed, been mowed two to three times due to their height and density. So at that point there would be no need to -- to replace the filter sock.

MR. HANNON: Okay. Just to follow up with what you said, so do you plan on using more of a shade grass seed mix on the site?

THE WITNESS (Bamman): It's -- it depends on latitude actually. The -- one of the criterion that we like to look at is the rate of growth. Certain fescues grow to greater heights. For maintenance purposes we want to focus on species that grow more densely and -- and stay low to the ground.

And those, those tend to be species that -- that

like the sunlight. So that's -- that's where we go.

And again, these, the bottom of the panels are roughly three feet off the ground. The top of the -- the panels are five to six feet off the ground. So it's -- it's not like we're really creating a cover to the -- to the grass.

MR. HANNON: Okay. Thank you.

THE WITNESS (Parsons): Mr. Hannon, I just would like to add that the New England semi shade grass and forest mix at this point in time, or something approved and equal by the owner would be used, and that is note number 18 on our erosion and sedimentation control notes plan sheet, sheet number EC-1.

THE WITNESS (Gustafson): This is Matthew Gustafson.

I'd like to also add that because of our phasing and the intent to stabilize after phase one with a seed mix that will be likely a contractor's mix that has -- probably has more full sunlight type species. So you'll likely see a mix post construction of grasses.

To highlight that, no matter what condition we likely have on site, whether it's semi-shade, you know, underneath the panels or in between some

1 of the panels, or full sun or partial sun, you'll 2 likely have the semi-shade mix which we're 3 proposing, you know, to stabilize post 4 construction as well as some of the residual turf 5 grass that are established in the contractor's mix 6 after day one. 7 So it will -- it will likely be a scenario of 8 best of both worlds and whatever grass takes will 9 certainly be the one that dominates in these 10 various shade conditions. 11 MR. HANNON: All right. Thank you. 12 There was a comment made earlier that the 13 swale design that was originally proposed by a 14 different engineering company, it's been modified. 15 Can you give me an idea as to approximately 16 when this latest design change came about? 17 THE WITNESS (Parsons): This is -- this is Brad The latest design change came about as 18 Parsons. 19 soon as we started working on the project. 20 MR. HANNON: Which was when? 21 THE WITNESS (Parsons): Oh, I want to say late 22 December -- or late 2019. 23 MR. HANNON: Okay. All right. Thank you. 24 People were talking about geology and I think

things of that nature. I mean, it's highly

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possible that I may have missed it, but was any geological data submitted as part of the application?

to be.

THE WITNESS (Parsons): So it was, I believe, included in our response to interrogatories as an attachment. It was originally also included as an appendix to the stormwater report that was -
MR. HANNON: Thank you. Okay. I'm going by memory now, so don't necessarily hold me to this because I'm finding out it's not as good as it once used

But in working for municipalities a number of years ago one of the things that I believe was sort of common practice is for fire equipment, fire marshals tended to prefer grade 12 percent or less. So I know that you were saying, or somebody mentioned that the slope of the roadway would be about 15 percent. And I believe the comment was made that the town fire department has not been contacted yet to see what their concerns might be.

I would maybe strongly suggest that you contact them just to make sure that you're not spinning your wheels on this one, because again the equipment gets heavy. I'm assuming this is a gravel drive. It's not paved, so I don't know how

the local fire marshal or the local fire chief is going to feel about that.

So that may be something that you want to do sooner rather than later. No need to have to come back with some type of a design change later on if this is something that can be resolved quickly, but that's just sort of a general comment.

- MR. BALDWIN: We can certainly take that as a homework assignment, Mr. Hannon, and take care of that between now and the next hearing date. Thank you.
- MR. HANNON: Yeah. I just think it's better for everybody to know what you're dealing with.

I will start asking some of my questions based on some of the material that's submitted as part of the applications, but I may be going back and forth on a couple of questions.

So for example, initially you were saying this is on page 5 of the petition, site work and land preparations expected to be completed by the end of 2020. How realistic is that today?

- THE WITNESS (Parsons): This is Brad. I won't speak for John, but I'll say that that's not something that's going to happen by the end of 2020.
- MR. HANNON: So if this project were approved when would you be looking at trying to start the site

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work and the preparation?

THE WITNESS (Parsons): Again, it's Brad. And John,

feel free to jump in after if need be.

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You know, additionally if this project were

approved through the Siting Council we still need to go through the CT DEEP stormwater permitting process.

Ideally I think the -- the project would -would be looking to start that sometime in the near future here with John, I would guess, with the intent of trying to start construction with the hope of being late winter, early spring.

THE WITNESS (Bamman): I'm sorry, Mr. Hannon.

MR. HANNON: Go ahead.

THE WITNESS (Bamman): Thank you.

No, I was just -- really wanted to clarify that the stabilization of the -- of the site with the -- the tackifiers, the -- the hydro seeding really rely -- relies on mother nature and we all -- we all know that we don't grow grass very well in the wintertime.

So even if we were to have permits in our hands today, more than likely we would not plan to start until -- until late winter, early spring. The timing is such that the -- the hydroseed mix

would be going down just at the beginning of growing season.

MR. HANNON: Okay. So then I'm assuming that the construction and installation of the solar arrays and equipment which was originally maybe scheduled in April, that's also going to be moved back some because of trying to stabilize the site first.

## Correct?

THE WITNESS (Bamman): That's correct. Yes, sir.

Mr. HANNON: Okay. And then the next comment on that was the final site stabilization testing and commissioning to be completed by July 15, 2021.

So I'm assuming that's also is going to piggyback on some of the other potential delays. Correct?

THE WITNESS (Bamman): Yes, sir.

Mr. HANNON: Okay. You see, here's kind of where I'm going with this. With the dropdead date, because of the L-REC considerations of January 2022 and based on the comments where it looks as though it may take about a month or so to install the racking, the electrical, the panels, things of that nature; I'm just wondering if there's a possibility of buying more time between stabilizing the site and when you start construction.

Because again, if things are moved back some, but you -- you have an extra time period built in for actually dealing with site stabilization that might be to everybody's advantage, but yet still not adversely impact you as far as when you need to be up and operating, you know, with that January 2022 date, you know, assuming the project is approved.

So I'm throwing that out as maybe something to think about, because I know Mr. Harder raised the issue about roughly a month of stabilization and I'm not sure that that -- it may be wishful, but I'm not sure it's realistic.

So this may be a way to maybe think about how to deal with the overall project with some new timing on it to make sure that as much of the site is stabilized as possible, but that's more of a comment than a question.

THE WITNESS (Nicolas): This is Jen Nicolas. If I could jump in with the note on extension -- or sorry, with the dropdead date? So we would actually have the possibility to petition PURA, the Public Utilities Regulatory Authority for additional time on that. And extensions that they give are really case by case, but I just -- just

wanted to add that.

MR. HANNON: Yeah. No, I appreciate that, because I mean, it sounds like the processes were approved by the Siting Council. The January 2022 date could be realistic based upon some of the numbers that I've seen.

So I'm just wondering if it's not going to take that long to actually construct the project; you can't buy more time upfront to make sure the site is that much more stabilized. So it eliminates potential problems while you're undergoing the construction operation. That's all.

I do have a question on page 9 of the petition. And this is open to anybody that attended the DEEP pre-app meeting. Would you care to reflect on the proper date of the meeting?

Because May 10th was a Sunday, and I can guarantee you that DEEP staff wasn't working on a Sunday.

THE WITNESS (Parsons): This is Brad Parsons. That

date was actually May 19th. I believe that was

referenced in -- or re-referenced in the response
to Interrogatory Number 56.

Mr. HANNON: Okay. It was the 19th. I agree with you.

And this ties in with one of the questions that

Mr. Cunliffe was asking earlier. I think he was asking to see if there was some kind of mapping or something to show the 15 to 20 percent growth areas with panels.

The reason I bring up the DEEP meeting, I mean, you guys had it in your petition, but the reason I'm bringing it up is because at that pre-app meeting the property we were told sloped west to east. And some of the comments were the slopes range from 5 to 30 percent, and there were some areas greater than 30 percent. The slopes on the site are in excess of 12 percent, and some areas more than 25, and areas with deep slopes between arrays that will not have panels, but they may be cleared and graded.

So that goes into, you know, part of my question about how much of the site is actually going to be graded. And the comment was there was little cutting or filling -- but I'm just curious as to with some of the steeper slopes.

I mean, Fred mentioned the 20 percent, but we know that there are slopes approaching 30, maybe even a little more steepness on them. So I'm trying to figure out how that's going to be handled?

THE WITNESS (Parsons): Sure. This is -- this is Brad
Parsons. I would say that subsequent to that
meeting and in some of our meetings with
contractors on site and DSD's further, you know,
evaluation from a construction standpoint has
probably slightly changed some of the statements
that were -- were possibly made at that meeting in
the sense of that the grading.

There will be no grading within the -- the array area and we are not removing or planning to remove stumps anymore, but rather flush cutting the trees at grade which will eliminate the need for -- for any of that shaping on-site. That would -- that would normally occur when you're removing stumps.

Furthermore, I believe that some of those questions and -- and concerns subsequent to that initial meeting with regards to 2 percent slopes was probably another iteration in between to where we are today because we did -- we did take a further look at -- at the percent of grades on site.

And while the racking manufacturers can achieve structural racking capabilities up to -- up to 30 percent, we did understand the concerns

here and we did look to -- to mitigate those concerns.

And I think in -- in response to our homework of getting Mr. Cunliffe the percent area on site, we can also provide some of those additional exhibits that were provided to CT DEEP that shows the percent grades on-site and the -- the length to which DSD went to look to avoid those grades on site.

Mr. HANNON: That would be appreciated. Thank you.

I know that there are five wetlands identified on the site. I think typically the Siting Council has been looking at trying to maintain buffers from wetland areas of approximately a hundred feet. I know there are some that come in narrower. There might be, like, a farm road or something that's been there for years, that type of thing.

So with what you're proposing in this project, like 22 feet to wetland one, 25 feet to wetland two, 47 feet to wetland three, 21 feet to wetland four, and zero for wetland five; what I'm concerned about is what kind of issue that might raise for the Council in the future. I mean, we're trying to establish some general protocols.

Granted, every site is different.

So can you just sort of explain why you didn't try to meet with the hundred? I understand, you know, the sort of quality of the wetland areas, but I'm just wondering if you could please just provide some guidance as to why you didn't stay roughly the hundred feet away from the wetlands?

THE WITNESS (Gustafson): This is Matthew Gustafson. I guess I'll start by saying that, certainly there have been projects in front of the Council and approved by the Council where that fairly arbitrary hundred-foot buffer has not been met.

To your point, you know, those are largely case-by-case basis where sometimes there's existing infrastructure, but a lot of the times it is based on existing quality and function and value of the wetland resources that determine the buffer distance that is appropriate. In this case that is certainly what was taken into account for establishing these buffer distances.

So you know, to not beat a dead horse, but you know, most -- the majority of the wetlands on site have been historically degraded in some fashion or another and/or are isolated features

that -- that do not support any functions or values that a secondary or principal level has established by the Army Corps of Engineers, so a function of that value protocol.

For that reason and in addition to the difficulties of balancing this site from a stormwater perspective as well as protection of these wetlands, it became again a balancing act of where we can push arrays and stormwater features without compromising the integrity of these wetlands. And that balancing act is what, you know, you're currently viewing today as -- as part of this proposal.

So certainly I -- I can recognize and -- and appreciate the struggle of the Council to establish a protocol for a buffer distance that they feel comfortable with. Unfortunately, I can't really speak to that all that well just because of the complexity of really from a professional standpoint what buffer distances are appropriate to various types of resources.

THE WITNESS (Parsons): Matt, if I could? I'd just like to add a little bit to that. And it's -- what I'll add is, you know, while a buffer distance is -- is great, I would state that CT

DEEP back in, I believe, it was the late 'nineties actually established some fairly good guidelines for municipalities, specifically actually almost removing the word "buffer," and really focusing in on that, that upland -- upland review area.

And as Matt was alluding to, it's really the science behind it so it's -- it's the science behind that wetland. It's the science behind the -- the impacts to that, that upland review area and the impacts to -- to that wetland I think is -- is a key factor in that.

And you know, furthermore, you know, reading through that, that document -- which is an interesting piece, is that DEEP in that document further recognized that the Department does not actually have and upland review area that they don't actually acknowledge one for -- for those types of state -- state projects.

So it's, again it goes back to what I believe -- and Matt, you can touch on this more than I can, but -- but the science behind the function and values of any specific wetland, whether it be a groundwater seep, or, you know, wet meadow which have it.

THE WITNESS (Gustafson): Yeah. So to elaborate and

hopefully fully address the question and -- and the nitty-gritty of it, you know, the majority of the wetlands on site, obviously we are working in close proximity to a number of them or directly with them/in them for wetland five.

However, in the case of wetlands one, two and four, no drainage from the project is directed towards those wetlands and the existing project wall in the construction condition. To that effect the project wall located in close proximity to those wetlands really does not have a significant material effect and certainly is not expected to result in a significant negative impact to those resources.

The other on-site wetlands that we're working obviously within wetland five, and draining towards in wetland three; in the case of wetland five, it being an entirely isolated feature, again, we performed a preliminary function and value assessment on all, all these on-site resources. And as you might suspect in a small isolated feature like wetland five it doesn't support and doesn't really have the potential for ever supporting any functions or values at any level.

As such, you know, clearing of it as long as we are not, you know, changing the hydrology, in effect dewatering it, or compacting its surface, affecting its soil profile, the project isn't expected to result in a significant negative impact to wetland five because we aren't going to be diminishing the function and value provided by that wetland.

Similarly with wetland three, although it does potentially form more of a headwaters deep system, because of the historic construction of Gaylord Mountain Road, whatever this feature was historically, in its current state it's highly altered. The -- the restricted outfall that Brad mentioned before that drains under Gaylord Mountain Road, whether a condition of it being undersized or just poorly maintained, it's actually resulting in a backwater flood condition seasonally to wetland three. And it's pretty substantially changed the high -- sorry, excuse me. Hydrological period.

That's not to say that that doesn't potentially result in more function and values being provided by wetland three, but because of its proximity to Gaylord Mountain Road and a

number of residences and the, kind of, the narrow nature and heavy anthropological influences of Gaylord Mountain Road, it also isn't considered to support any functions of values at secondary principal level.

So similarly the projects, while located in, you know, within 50 feet just on that outside, 50 feet of wetland three is not anticipated to substantially change or diminish those, those lack of functions and values provided.

So that's -- that's really the driving force behind, you know, in this case, in this project why buffer distances less than a hundred feet were considered suitable.

Mr. HANNON: Okay. Thanks. I just wanted to get something on the record so that, you know, we have something to stand on for future applications should this project get approved.

My next question is dealing with page 16 on the application under wetlands. It's the last sentence in that first paragraph. It says, none of these wetland areas will not be adversely impacted -- well, it said by 'ant' project. I mean, that's probably the any project -- development activity.

But it looks as though there's two negatives in there. So I'm just trying to make sure that what you're trying to say there is the wetlands will not be adversely impacted?

VOICES: (Unintelligible.)

THE WITNESS (Gustafson): Yeah, that's correct. This says -- the sentence should read and what we are attempting to state is that the proposed project as it stands today is not anticipated to result in a significant negative impact to on-site wetland resources.

- Mr. HANNON: Okay. I just wanted to make sure. I
   didn't want to --
- THE WITNESS (Gustafson): Yeah, thank you for that clarification. It's a good catch.
- MR. BALDWIN: Mr. Hannon, if I could assist? That same question came up in Interrogatory Number 47. So it has been corrected in the record, but thank you for raising that again.
- Mr. HANNON: Okay. And looking at the letter submitted by the Department of Public Health, the drinking water section, a couple of things there that are of concern. One of the comments was refueling your vehicles and machinery should take place on an impervious pad with secondary containment

designed to contain fuel.

Is that something that is being looked at for this project where there would be on-site refueling of vehicles?

THE WITNESS (Bamman): This is John Bamman again,

Mr. Hannon. Yeah, that is correct. And not only
refueling of vehicles, but any fuel storage on
site during construction will be strictly limited
to a fuel containment designed for that, that
purpose.

Mr. HANNON: Yeah, I mean -- and the fuel and other hazardous materials being stored, I mean, that was another issue. Because again, this is a public water supply watershed area. So that does raise some red flags about having some of those types of activities going on there?

So I don't know if that's something that you can rethink, but again, to me it raises a red flag when you're talking about a watershed area.

THE WITNESS (Parsons): This is Mr. Parsons --

MR. HARDER: I think -- I've got two more quick questions.

I'm sorry. Go ahead?

THE WITNESS (Parsons): I was just going to state that the refueling thing is an issue that we can look

into to see if there are any other side options to -- to discuss.

Mr. HANNON: Thank you.

I have two other questions. One, again it goes back to, like, the hundred-foot buffer. I haven't seen the final stormwater general permit, but I thought in Appendix I -- which everybody has been looking at, I thought there was an issue that the agency was taking up if you're closer than a hundred feet.

I mean, and I forget what it originally said, so I apologize for that, but I thought that that might have been an issue about getting the general permit. Is that something that you can address, because I thought that was language specifically in the general permit originally?

THE WITNESS (Parsons): This is -- this is Brad

Parsons. So the previous general permit and
guidance stated under item number one, and I
believe it was 1E, that if a project was
disturbing any, any areas within the hundred-foot
buffer as they -- as they labeled it there, would
be subject to treating the panels as impervious
for the purpose of calculating water quality
volume.

MR. HANNON: Okay.

THE WITNESS (Parsons): However, during the -- which to the point this project was -- was designed to do. So since if we looked at this project initially versus it being designed to the guidance that was originally proposed and actually was in the draft permit that was issued for public comment, we are treating the water quality volume and -- and would have met Appendix I at that time.

However, subsequent revisions and reissuance of -- of that document in October of this year will require us to potentially look at obtaining an individual stormwater permit for this site.

Mr. HANNON: Okay. And then one other comment about the general permit. I thought that one of the other things that the agency was looking at is the possibility of requiring an independent third-party to monitor erosion sedimentation control measures. Is that still in effect?

THE WITNESS (Parsons): The new Appendix I actually has

changed and is requiring the design professional to be in charge of the overall monitoring at the site.

I don't have the language exactly in front of me, but that is something we can -- we can get

everybody. But basically the designing professional of the site will be responsible for the monitoring.

They will be responsible for monitoring the site once a month, and the other times that site would be monitored by a qualified inspector basically reporting to the design professional or PE. And the PE would be required to stamp and sign every weekly report that is issued for the site going forward.

Mr. HANNON: Okay. And then turning into that, is
there anything in particular that deals with the
larger storms for going out and making sure that
all the erosion control measures are still
actively working after a large storm? I mean, it
may not be sort of the standard scheduled visit.

THE WITNESS (Parsons): Yeah. So -- so the standard general permit would require -- does require those, the weekly inspections, but also requires that if a storm event in greater than half of an inch rain -- and this is not just for solar projects.

MR. HANNON: Right.

THE WITNESS (Parsons): This is for any development project in the state of Connecticut, that any

development project within the state of Connecticut requires that the site be inspected at a minimum of weekly, or within 24 hours of a rain event of half inch or more that generates a discharge, but it's -- really anytime you're going to get a rain event of half an inch or more you're going to go out and look at those sites, or you are going to go out and look at those sites in my opinion.

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Furthermore, I'll state that the general permit also, not only states that it has to be done within 24 hours, it also states that if the storm event, I believe, is greater than half an inch and occurs over the weekend then that storm still needs to be an event, and the site still needs to be monitored within 24 hours of that, that rain event.

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I believe if it is less than half an inch or around a quarter of an inch, that -- and that occurs over a weekend period. It can happen on -within the first working day following that such event.

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Mr. HANNON: Thank you very much.

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I have no additional questions.

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THE WITNESS (Bamman): Mr. Hannon, this is John, John

Bamman. Before you sign off I just wanted to respond.

MR. HANNON: Sure.

THE WITNESS (Bamman): You had mentioned in the course of your questions developing protocols on the part of the panel for evaluating -- I assume that's for evaluating these types of petitions.

Is that right?

Mr. HANNON: Yes.

THE WITNESS (Bamman): And my -- my comment is simply this is a challenging site, but I just wanted the panel to consider that DSD is a national organization. We're building solar facilities throughout the country.

In Connecticut in particular just in the past couple of years we've built more than 14 megawatts worth of solar. We develop, originate, develop. We have our own in-house design engineering facilities. And as I mentioned earlier we build, own, and operate every system that we -- that we -- well, not every, going forward every system that we build.

It is our hope that if we're granted this permit and successfully build, own and operate this system in -- in Hamden that that will

positively impact the types of protocols that the panel is trying to develop, such that systems even as challenging as this one will be given a 4 chance -- to be built.

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We're all very passionate about solar renewable energy. And I'm -- I'm a resident of Norwalk, Connecticut. I've been a Connecticut resident all my life and I would just like to see more solar than less.

I'm sensitive to the letters, concerns, but in the larger picture I really think it's important that Connecticut do its part and just hope that we can be -- be part of that, that process to -- to expand solar as a result of our -- our positive performance.

THE HEARING OFFICER: Thank you, Mr. Bamman.

We are going to continue with cross-examination with Mr. Nguyen, at which time we will take a break for the evening before we commence the public comment session.

Mr. Nguyen?

Thank you, Mr. Morissette. I do have a MR. NGUYEN: few questions for the panel, anyone in the panel. Response to Interrogatory Number 65, it mentioned a 24-hours monitoring and planned maintenance.

1 The question is, where is the monitoring 2 center located? 3 THE WITNESS (Bamman): Mr. Nguyen this is John Bamman 4 again with DSD. Twenty-four hour monitoring is 5 done by -- by a cellular connection to sensors and 6 that are part of the engineered and designed 7 system, the electrical system of the solar farm. 8 That, that data is collected on an ongoing 9 24/7 basis. Software platforms are set up such 10 that if the system ventures outside of certain 11 limits, electrical limits, an alarm is sounded, 12 e-mails are sent and our own end team will 13 respond. 14 So in case you were thinking that perhaps 15 there was someone who was on site 24/7, that's not 16 the case. 17 MR. NGUYEN: No. No, I understand. So it will be 18 remotely monitored? 19 THE WITNESS (Bamman): Correct. And you put it better 20 than I did. 21 MR. NGUYEN: And where is that located? 22 THE WITNESS (Bamman): I'm sorry. I'm not 23 understanding. 24 MR. NGUYEN: Yes, it's remotely monitored. And the 25 question is where is that monitoring center that's monitoring the system? Where is it located? Is it in Connecticut?

THE WITNESS (Bamman): No. The -- there we -- we have as part of our system data acquisition systems which report the performance of the -- of the system on a, as they say, 24/7 basis, that information is -- is uploaded to a cloud so that anyone with access to that platform can download those, the data and will receive alarms.

So we have O and M, maintenance and operations personnel all over the country, and depending on who is closest to the site at the particular time they will respond. So there's no -- there's no call center per se.

MR. NGUYEN: I see. In terms of the physical maintenance, where would those folks come from?

THE WITNESS (Bamman): Well, as I say, we're a national organization. We have maintenance folks all over, you know, cover -- covering the array, the system of -- of solar installations that we've built.

I believe in the northeast the majority of our O and M people are in and around the Schenectady or Albany, New York, area where our headquarters are. So their response time would be -- be coming down from Albany.

MR. NGUYEN: So in case of an emergency folks are coming down from New York?

THE WITNESS (Bamman): Yeah, I'm not -- I'm not absolutely sure. I could get back to you to answer that more specifically.

THE WITNESS (Nicolas): Just to add to that. This is

Jenny Nicolas with DSD. I mean, I think it

depends what kind of an emergency. If it's an

event where first responders would need to be

called that would certainly be the first course of

action and we would be training first -- local

first responders and giving them a tour of the

site and understanding of what would need to be

done, how to turn the system off should an event

occur.

But for certain issues, as John said, we use a software platform that can be monitored wherever you are and give notification if the system is not performing to a certain level.

MR. NGUYEN: And I apologize. To follow up just so I'm clear, you said that in case of an emergency. For example, shutdown the facility, you would depend on the local respondent? Is that what you're saying?

THE WITNESS (Gabor): I can add a little. This is Matt

from DSD. I can add a little context to that.

There is a re-closer on-site that can be tripped offline from anywhere, but it's also microprocessing the electricity that's going through it. If it recognizes a fault condition it's going to trip off-line automatically and require, you know, five minutes of healthy electricity to ultimately turn back on.

So in addition to manual shutdown we can also be shut down from fault events and also from the controls of someone on our -- on our team.

MR. NGUYEN: In the case of commercial power failure, does the facility automatically shut down?

THE WITNESS (Gabor): This is Matt from DSD again.

Yes, the -- our inverters -- rely on a grid voltage. So if the gird is, you know, a blackout or shut down for whatever reason, our inverters are automatically turning off.

MR. NGUYEN: On page 12 of the petition it's indicated that during the construction of the project higher levels of noise are anticipated, but it will be conducted during the normal working hours.

Is that right?

THE WITNESS (Bamman): Yeah, that's -- that is correct.

Our normal building hours are from 7 a.m. to

1 3 p.m., Monday through Friday, but certainly those 2 can be adjusted as -- as local ordinances may --3 may require. 4 MR. NGUYEN: Yes, in your petition it's actually 5 indicated that the normal working hours are from 6 7 a.m. to 7 p.m., Monday through Saturday. 7 So which one would be correct that are 8 considered normal working hours? 9 THE WITNESS (Bamman): I guess I should have read our 10 petition. I -- I'd have to get back to you, 11 Mr. Nguyen. 12 MR. NGUYEN: And for whatever, it's indicated on the 13 petition that it's from 7 a.m. to 7 p.m., Monday 14 through Friday and that's defined as normal 15 working hours. 16 And it just seemed to me that Saturday is the 17 weekend. And so to the extent that it's normal 18 working hours, that doesn't seem normal to me. 19 you said you were going to check with the local? THE WITNESS (Parsons): This is -- this is Brad 20 21 Parsons. I think I can. I can answer that 22 question, as well for John here. 23 As well it's, you know, really we -- we 24 define these working hours 7 a.m. to 7 p.m., 25 Monday through Saturday with -- with the

understanding that we were under an obligation to meet an in-service date per the -- the L-REC of January 2022.

So providing some additional work hours or ability for work hours in, you know, even on Saturday was something that we were proposing. It doesn't necessarily mean that the work will be occurring every Saturday or that it will occur to seven o'clock on -- on every night. It is really more giving the ability to -- to have those workhours to meet the required in-service date that is imposed on us by -- by the utility.

I believe Jenny did -- did mention it before.

That is something that can be petitioned to PURA

for an extension, but again there is a process

to -- to get that extension as well.

- MR. NGUYEN: You mentioned about PURA. I don't understand. You would need PURA's permission for that?
- THE WITNESS (Parsons): Jenny, can you handle that, the PURA permission for extension?
- THE WITNESS (Nicolas): Sure. Yeah, this is Jenny with DSD. So in the event in order we have our L-REC assurance performance obligation and we're required to have our system commercially

operational by January of 2022.

In the event that we're not able to do that, we have the opportunity to petition PURA for an extension. So we are hoping that we will be able to place this in service before then, but we do have the opportunity to go through PURA if we need to.

- MR. NGUYEN: When you say PURA, you're talking about the Public Utilities Regulatory Authority agency?

  THE WITNESS (Nicolas): Yeah, that's correct.
- MR. NGUYEN: I work for PURA, and I'm not quite clear if PURA regulated solar installation.
- MR. BALDWIN: Mr. Nguyen, I think what Ms. Nicolas was saying that they have authority over the L-REC/Z-REC contracts that are a part of the project, and any -- any change to the terms of those contracts would require PURA approval.
- MR. NGUYEN: Now to the extent of the normal working hours, is it regulated by local officials?
- THE WITNESS (Bamman): John Bamman here. I would just offer that DSD would be amenable to limiting working hours to accommodate the panel -- the committee.
- MR. BALDWIN: And typically in my experience,
  Mr. Nguyen, It's the Siting Council that sets

1 those hours of operation. And we would adhere to 2 those hours of operation established. 3 THE WITNESS (Parsons): This is -- this is Brad 4 I -- I would like to state that on Parsons. 5 page 92 of the environmental assessment the Town 6 does have an active noise ordinance, however 7 construction noise is exempt during daytime hours 8 which actually is 7 a.m. to 7 p.m. at night. 9 MR. NGUYEN: Okay. That's all I have, Mr. Morissette. 10 Thank you. 11 THE HEARING OFFICER: Thank you, Mr. Nguyen. Before we 12 break --13 THE WITNESS (Kapur): Sorry. 14 THE HEARING OFFICER: Yes? 15 THE WITNESS (Kapur): Sorry this is Amol from DSD. Ι 16 was just going to ask if I can interject just to 17 follow up on one of the questions that was previously asked? But I can wait until after the 18 19 break if you'd like. THE HEARING OFFICER: This evening is for public 20 21 comment only. You will not have a chance to 22 testify or answer questions at that time. So if 23 it's a quick response, please do so. Otherwise, 24 we'll wait until the next hearing. 25 THE WITNESS (Kapur): Yeah, if you don't mind? So

again, Amol from DSD. Just on the O and M and the maintenance questions.

So at this stage we haven't chosen our O and M provider, but typically what we do is we will use either a national or a regional vendor to help maintain the system.

So we have an asset management group that's based in Schenectady, New York, but -- but for this project here we'll have a local -- or at least a national vendor that will have a local representative in and around the area, typically in driving range of the system, if required.

THE HEARING OFFICER: Very good. Thank you for that clarification.

Attorney Baldwin, you have a laundry list of items that need to be addressed for our next hearing. Would you like to review them?

MR. BALDWIN: Sure. We can do that. And please let me know if I've missed any.

We have to try and clarify the address for some of the adjacent parcels, whether it's 360 or 380 Gaylord Mountain Road.

There were a couple of responses that we will follow up on regarding grades at the facility on the property, and perhaps even provide the Council

with a graphic presentation of where those slopes are located. I may have jumped ahead a little bit.

On the issue of the driveway and the grade of 15 percent, it came up twice where we were to reach out to the local emergency service folks and get their feedback on the grade of the driveway.

I think I originally had a homework assignment regarding the project life, but I think we did get the additional clarification from Mr. Gabor and Mr. Kapur on that issue.

THE HEARING OFFICER: Yes, I agree to that.

MR. BALDWIN: I think the issue regarding the drip edge and the fact that it was previously perpendicular, now parallel to the slope was addressed through the interrogatory response and the clarification of that issue.

I have some additional clarification regarding the stormwater benefits and the stormwater calculations comparing meadows to tree cover as an issue that came up during the discussion.

We've already discussed the slope illustration. We discussed the fire department, contacting the emergency service professionals in

town.

I think what I wrote down as a homework assignment also on the issue of the schedule, and there were some questions regarding the schedule and how it might be adjusted based on where we are in the process today.

I thought it might be helpful if we gave some additional thought to that and scoped out a schedule based on perhaps a best-case scenario if construction of start knowing that we have the cushion built into the process as was described by Mr. Bamman. That might help illustrate that construction schedule and how additional time is built into the process.

There was -- and it goes along with the slopes question, but there was a question regarding how much of the site is actually going to be graded, and where other material in the steeper slopes would be going on the property.

We will get some follow-up information on the refueling and fuel storage on the property in response to Mr. Hannon's question.

And then some additional information regarding the exact language from the general permit regarding independent party inspections and

clarifications, or monitoring of the property -although, I think Mr. Parsons did address that,
but we'll confirm that once we see the transcript.

And then I think Mr. Kapur's last comment, I have another homework assignment regarding emergency response from the company, where those folks would come from and I think Mr. Kapur's follow-up question -- follow-up response did address that issue.

Those are the homework assignments that I have, Mr. Morissette. I don't know if I missed any?

THE HEARING OFFICER: I have one more. The panel did provide an answer, and it has to do with the loss of power from the shifting orientation of the panels.

The answer was 5 percent, but it was not an affirmative. You can check that to see if you want to correct that or not.

MR. BALDWIN: Very good.

THE HEARING OFFICER: Thank you, Attorney Baldwin.

So the Council will now recess until 6:30 p.m., at which time we will commence the public comment session of this remote public hearing.

1	Thank you, everyone. We'll see you at 6:30.
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3	(End: 5:19 p.m.)
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## CERTIFICATE

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are a complete and accurate computer-aided transcription of my original verbatim notes taken of the Zoom Remote Council Meeting (Teleconference) in Re: CONNECTICUT SITING COUNCIL PETITION NO. 1425, GAYLORD MOUNTAIN SOLAR PROJECT 2019, LLC, PETITION FOR A DECLARATORY RULING, PURSUANT TO CONNECTICUT GENERAL STATUTES §4-176 AND §16-50K, FOR THE PROPOSED CONSTRUCTION, MAINTENANCE AND OPERATION OF A 1.9-MEGAWATT AC SOLAR PHOTOVOLTAIC ELECTRIC GENERATING FACILITY LOCATED AT 360 GAYLORD MOUNTAIN ROAD IN HAMDEN, CONNECTICUT, AND ASSOCIATED ELECTRICAL INTERCONNECTION, which was held before JOHN MORISSETTE, Member and Presiding Officer, on November 17, 2020.

I hereby certify that the foregoing 128 Pages

Robert G. Dixon, CVR-M 857

Notary Public

BCT Reporting, LLC

55 Whiting Street, Suite 1A

Plainville, CT 06062

My Commission Expires: 6/30/2025

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